RESEARCH MEMORANDUM

EFFECT OF A WING LEADING-EDGE FLAP AND CHORD-EXTENSION ON THE HIGH SUBSONIC CONTROL CHARACTERISTICS OF AN AILERON LOCATED AT TWO SPANWISE POSITIONS

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NATIONAL ADVISORY COMMITTEE
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EFFECT OF A WING LEADING-EDGE FLAP AND CHORD-EXTENSION ON THE HIGH SUBSONIC CONTROL CHARACTERISTICS OF AN AILERON LOCATED AT TWO SPANWISE POSITIONS

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SUMMARY

An investigation was made in the Langley high-speed 7- by 10-foot tunnel to determine the effects of a wing leading-edge modification on the effectiveness of a trailing-edge flap-type aileron. The control was tested on the left half of the wing of a sting-mounted wing-fuselage model having a wing of aspect ratio 4, taper ratio 0.3, 45° sweepback, and NACA 65A006 airfoil sections. The wing leading-edge modification was the optimum configuration from a previous investigation and consisted of a chord-extension over the outboard 35 percent of the semispan in combination with a full-span leading-edge flap deflected 6°. The aileron spanned 50 percent of the left half of the wing and was tested at two spanwise locations. Aileron deflections up to approximately ±30° were tested through an angle-of-attack range which varied with Mach number and a Mach number range from 0.40 to 0.94. Complete results are presented in tabular form as increments in aerodynamic coefficients due to aileron deflection. A representative part of the data is presented graphically, and results are discussed on the basis of these data.

Modifying the wing leading edge generally had only a small effect on the static control characteristics of either the inboard or outboard aileron. The effect of aileron spanwise position was small and did not favor either location over the entire test range.

INTRODUCTION

Detailed wind-tunnel investigations have shown that, for certain thin sweptback wings, leading-edge separation combines with a spanwise pressure gradient to create a vortex-type flow over most of the lift range. This flow can result in undesirable static longitudinal stability characteristics for certain aspect ratios and can lead to the objectionable

characteristic termed "pitch-up" which is found in many current airplane designs having thin sweptback wings. A detailed discussion of this flow phenomenon is given in reference 1. Outboard leading-edge chord-extensions have been effective in improving the longitudinal stability characteristics of wings of this type (ref. 2). In addition, appreciable improvement in the lift-drag ratio for thin sweptback wings up to a Mach number of 0.90 was obtained with a deflected leading-edge flap (refs. 3 and 4). The investigation of reference 5, therefore, was made to determine the extent to which these gains in longitudinal stability and lift-drag ratio could be combined at high subsonic speeds. For the model investigated, a leading-edge chord-extension over the outboard 35 percent of the semispan in combination with a full-span leading-edge flap deflected 6° gave best results from overall considerations of stability and performance.

The present investigation was made on the wing-fuselage model used in reference 5 to determine the effects of the optimum wing leading-edge modification obtained in reference 5 on the control characteristics of a trailing-edge flap-type aileron located at two spanwise positions. The same wing-fuselage model was used in reference 6 to determine the effects of the leading-edge modification on a spoiler-type aileron located at two spanwise positions. The wing had an aspect ratio of 4, a taper ratio of 0.3, 45° of sweepback of the quarter-chord line, and streamwise NACA 65A006 airfoil sections. Tests were made in the Langley high-speed 7- by 10-foot tunnel through a Mach number range from 0.40 to 0.94 and an approximate angle-of-attack range from -2° to 24° at the lower speeds and -2° to 10° at a Mach number of 0.94. Complete incremental force and moment coefficients due to aileron deflection are listed in tabular form and a representative part of the data is presented graphically.

SYMBOLS

The forces and moments measured on the model are presented about the wind axes which, for the conditions of these tests (zero yaw), correspond to the stability axes. The origin of the axes was in the plane of symmetry at a longitudinal position corresponding to the projection of the quarter-chord point of the wing mean aerodynamic chord (fig. 1).

All force and moment coefficients presented are based on the plan form of the basic wing without chord-extensions. The area of the chord-extensions was 3.8 percent of the basic-wing area. Incremental effects due to control deflection were produced by an aileron on only the left half of the complete wing.

C_L lift coefficient, Lift/qS

C_D drag coefficient, Drag/qS

C_m pitching-moment coefficient, Pitching moment/$qS\bar{c}$

C_l rolling-moment coefficient, Rolling moment/qSb

C_n yawing-moment coefficient, Yawing moment/qSb

C_Y lateral-force coefficient, Lateral force/qS

Δ prefix signifying increment of coefficient due to control deflection

q free-stream dynamic pressure, $\frac{\rho V^2}{2}$, lb/sq ft

S wing area before leading-edge modification, 2.25 sq ft

b wing span, 3 ft

$\bar{c}$ mean aerodynamic chord of basic wing, 0.823 ft

c local wing chord of basic wing, ft

R Reynolds number based on $\bar{c}$

M free-stream Mach number

V free-stream velocity, ft/sec

ρ mass density of air, slugs/cu ft

y_i spanwise distance from plane of symmetry to inboard end of control, measured perpendicular to plane of symmetry, ft

δ control deflection, positive when trailing edge is below wing-chord plane, deg

α angle of attack of fuselage center line and wing chord line, deg

Subscript:

nom nominal, used to identify the approximate angles presented graphically. (Actual angles are listed in the appropriate tables.)

MODEL AND APPARATUS

A drawing of the wing-fuselage model is given in figure 1 and a photograph of the model mounted in the tunnel is shown as figure 2. Ordinates of the fuselage are given in table 1.

The wing had 45° sweepback referred to the quarter-chord line, an aspect ratio of 4.0, a taper ratio of 0.3, and NACA 65A006 airfoil sections parallel to the plane of symmetry. The wing was made of solid aluminum alloy and the stiffness was reduced in order to provide for the leading-edge modification and the controls.

Provision for the wing leading-edge modification was made by cutting the wing along the 20-percent chord line, and leading-edge flap angles of 0° and 6° were obtained with preset steel inserts. After setting a desired flap angle, the groove in the wing was filled and finished flush to the wing surface. The chord-extension was made by using a larger insert to extend the nose section forward $0.10\bar{c}$. The two segments of the airfoil (nose and trailing-edge sections) were joined by a smooth fairing. Angular distortion of the leading-edge flap and chord-extension under load was checked analytically and found to be negligible.

Provision for the trailing-edge flap-type ailerons was made by cutting the wing along the 70-percent chord line and preset steel inserts were used to attach the ailerons to the wing at the desired control deflections. The groove in the wing was then filled and finished flush to the wing surface to simulate the control configuration that would be obtained with a sealed, radius-nose aileron. The controls spanned 50 percent of the wing semispan and were tested on the left wing at spanwise stations of $\frac{y_i}{b/2} = 0.25$ and 0.50. Forces and moments were measured by a six-component strain-gage balance located within the model fuselage.

CORRECTIONS

Blockage corrections were determined by the method of reference 7 and were applied to the Mach numbers and dynamic pressures. Jet-boundary

corrections, applied to the angle of attack and drag, were calculated by the method of reference 8. The angle of attack has been corrected for deflection of the sting-support system under load. The basic-model data (fig. 4) were obtained from reference 5 and therefore have the corrections of reference 5 applied.

Aileron deflections were measured in the wind-off condition and were believed to be little affected by aerodynamic load.

TESTS

The sting-supported wing-fuselage model was tested in the Langley high-speed 7- by 10-foot tunnel. Data were obtained for each model configuration by setting the tunnel Mach number and then rotating the model through an angle-of-attack range. Tests were made through a Mach number range from 0.40 to 0.94. The approximate angle-of-attack range varied from -2° to 24° at the lower test speeds and from -2° to 10° at $M = 0.94$. The angle of attack at the higher Mach numbers was limited by tunnel choking conditions. The ailerons were tested through a deflection range of about $\pm 30^\circ$.

The variation of average test Reynolds number based on the wing mean aerodynamic chord with Mach number is given in figure 3.

PRESENTATION OF DATA

Incremental aerodynamic coefficients due to aileron deflection for the complete investigation are presented in tabular form as follows:

Table*	Spanwise location of control, $\frac{y_i}{b/2}$	M	δ	α
2	0.25	0.40	Range	Range
3	↓	.60	↓	↓
4	↓	.70	↓	↓
5	↓	.81	↓	↓
6	↓	.85	↓	↓
7	↓	.90	↓	↓
8	↓	.94	↓	↓
9	0.50	.40	Range	Range
10	↓	.60	↓	↓
11	↓	.70	↓	↓
12	↓	.81	↓	↓
13	↓	.85	↓	↓
14	↓	.90	↓	↓
15	↓	.94	↓	↓

*Parts (a) of the tables present data for the plain wing and parts (b) for the wing with the modified leading edge.

Lift, drag, and pitching-moment characteristics of the model with the aileron undeflected are presented in figure 4. These data were obtained from reference 5 and are presented without discussion to show the model characteristics with and without leading-edge modification.

A representative part of the test data is plotted in figures 5 to 10 to present graphically the general results of the investigation. The effect of modifying the wing leading edge on the aileron characteristics is presented in figures 5 to 8. Figures 9 and 10 present the effect of spanwise location on the aerodynamic effectiveness of the ailerons on the wing with the modified leading edge.

The values given for angle of attack α_{nom} in figures 5, 6, and 9 are nominal values of the angles of attack at which the test points were obtained. The absolute magnitude in angle-of-attack difference between any two corresponding test points is small, as shown in the tables, and results from the jet-boundary and sting-deflection corrections.

RESULTS AND DISCUSSION

Results of this investigation are discussed on the basis of data presented graphically in figures 5 to 10. These data were arbitrarily chosen as being representative. It should be emphasized, however, that complete results are presented in tables 2 to 15.

Effect of Wing Leading-Edge Modification on the Variation of Aileron Characteristics With Aileron Deflection

The effect of modifying the wing leading edge on the variation of incremental aerodynamic coefficients with aileron deflection is given for the two spanwise control positions in figures 5 and 6. In general, throughout the test range, modifying the wing leading edge had only a small effect on the incremental aerodynamic coefficient produced by control deflection of either the inboard or outboard aileron and the largest effect was on the incremental pitching-moment coefficient due to deflection of the outboard control at the lower test speeds (fig. 6(e)). These results at high subsonic speeds are in general agreement with results obtained in similar investigations at low speed in reference 9 and at supersonic speeds in reference 10 wherein the leading-edge modification included only a chord-extension.

Effect of Wing Leading-Edge Modification on the Variation of the Aileron Characteristics With Angle of Attack

The effect of modifying the wing leading edge on the variation of incremental rolling- and yawing-moment coefficients produced by maximum test aileron deflections with angle of attack is presented for the two spanwise control positions at $M = 0.85$ in figures 7 and 8. Modifying the wing leading edge did not change the general variation of ΔC_l and ΔC_n with angle of attack and had only a small effect on the absolute magnitudes although there was a tendency to decrease the static roll effectiveness of the down-going aileron at the higher test angle of attack, especially for the inboard control.

Effect of Spanwise Position on the Variation of Aileron Characteristics With Aileron Deflection

The effect of aileron spanwise position on the variation of ΔC_l, ΔC_n, and ΔC_m with aileron deflection on the wing with the modified leading edge is shown in figure 9. In general, the effect of spanwise position was small and did not favor either the inboard or outboard location over the whole test range.

Effect of Spanwise Position on the Variation of Control Characteristics With Angle of Attack

The effect of aileron spanwise position on the variation of ΔC_l and ΔC_n produced by maximum test control deflections with angle of attack is presented in figure 10 at $M = 0.85$ for the wing with the modified leading edge. The general variation of ΔC_l and ΔC_n with angle of attack was unaffected by aileron spanwise location. Based on total maximum positive and negative control deflection, the inboard aileron gave slightly higher values of static roll effectiveness up to an angle of attack of about 12° with the outboard control becoming slightly more effective at the higher angles primarily because of the increase in effectiveness of the outboard aileron for positive deflections.

CONCLUSIONS

A wind-tunnel investigation of a wing-fuselage model was made through an angle-of-attack range to a Mach number of 0.94. The purpose was to determine the effects of a wing leading-edge modification on the incremental aerodynamic coefficients due to deflection of a trailing-edge flap-type aileron located at two spanwise positions. Results indicate the following conclusions:

1. Modifying the wing leading edge generally had only a small effect on the static control characteristics of either the inboard or outboard aileron.

2. In general, the effect of aileron spanwise position was small and did not favor either the inboard or outboard location over the entire test range.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field, Va., February 2, 1955.

REFERENCES

1. Furlong, G. Chester, and McHugh, James G.: A Summary and Analysis of the Low-Speed Longitudinal Characteristics of Swept Wings at High Reynolds Number. NACA RM L52D16, 1952.

2. Goodson, Kenneth W., and Few, Albert G., Jr.: Effect of Leading-Edge Chord-Extensions on Subsonic and Transonic Aerodynamic Characteristics of Three Models Having 45° Sweptback Wings of Aspect Ratio 4. NACA RM L52K21, 1953.

3. Spreemann, Kenneth P., and Alford, William J., Jr.: Small-Scale Transonic Investigation of the Effects of Full-Span and Partial-Span Leading-Edge Flaps on the Aerodynamic Characteristics of a 50° 38' Sweptback Wing of Aspect Ratio 2.98. NACA RM L52E12, 1952.

4. Alford, William J., Jr., and Spreemann, Kenneth P.: Small-Scale Transonic Investigation of a 45° Sweptback Wing of Aspect Ratio 4 With Combinations of Nose-Flap Deflections and Wing Twist. NACA RM L52K13, 1953.

5. Spreemann, Kenneth P., and Alford, William J., Jr.: Investigation of the Effects of Leading-Edge Chord-Extensions and Fences in Combination With Leading-Edge Flaps on the Aerodynamic Characteristics at Mach Numbers From 0.40 to 0.93 of a 45° Sweptback Wing of Aspect Ratio 4. NACA RM L53A09a, 1953.

6. Thompson, Robert F., and Taylor, Robert T.: Effect of a Wing Leading-Edge Flap and Chord-Extension on the High Subsonic Control Characteristics of a Spoiler-Slot-Deflector Control Located at Two Spanwise Positions. NACA RM L54I09, 1954.

7. Herriot, John G.: Blockage Corrections for Three-Dimensional-Flow Closed-Throat Wind Tunnels, With Consideration of the Effect of Compressibility. NACA Rep. 995, 1950. (Supersedes NACA RM A7B28.)

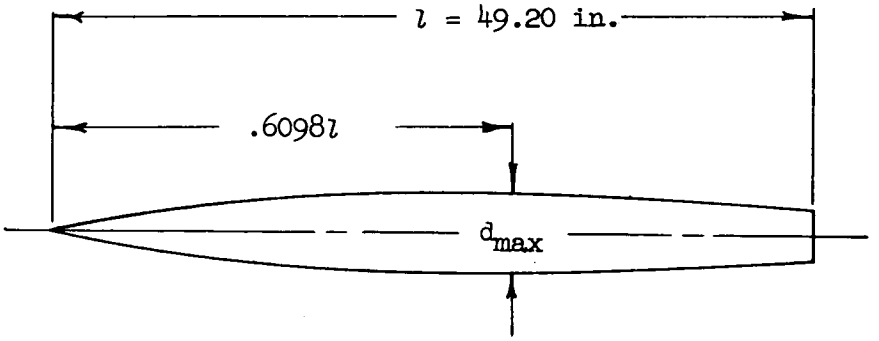
8. Gillis, Clarence L., Polhamus, Edward C., and Gray, Joseph L., Jr.: Charts for Determining Jet-Boundary Corrections for Complete Models in 7- by 10-Foot Closed Rectangular Wind Tunnels. NACA WR L-123, 1945. (Formerly NACA ARR L5G31.)

9. Cancro, Patrick A.: Low-Speed Aileron Effectiveness As Determined by Force Tests and Visual-Flow Observations on a 52° Sweptback Wing With and Without Chord-Extensions. NACA RM L53B26, 1953.

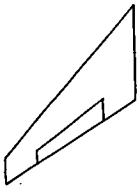
10. May, Ellery B., Jr.: Investigation of the Effects of Leading-Edge Chord-Extensions on the Aerodynamic and Control Characteristics of Two Sweptback Wings at Mach Numbers of 1.41, 1.62, and 1.96. NACA RM L50L06a, 1951.

TABLE 1.- FUSELAGE ORDINATES

[Basic fineness ratio 12, actual fineness ratio 9.8 achieved by cutting off rear portion of body]



Ordinates, percent length	
Station	Radius
0	0
.61	.28
.91	.36
1.52	.52
3.05	.88
6.10	1.47
9.15	1.97
12.20	2.40
18.29	3.16
24.39	3.77
30.49	4.23
36.59	4.56
42.68	4.80
48.78	4.95
54.88	5.05
60.98	5.08
67.07	5.04
73.17	4.91
79.27	4.69
85.37	4.34
91.46	3.81
100.00	3.35
Leading-edge radius = 0.0006l	



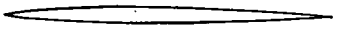
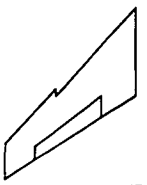


TABLE 2.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.40

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.05	.0020	.0021	-.0170	.0107	-.0002	.0023
.01	.0017	.0017	-.0220	.0106	-.0005	.0048
2.07	.0393	.0029	-.0191	.0107	-.0009	.0050
4.12	.0348	.0032	-.0216	.0104	-.0014	.0047
6.18	.0165	.0024	-.0194	.0102	-.0019	.0046
8.24	.0165	.0035	-.0145	.0098	-.0018	.0058
10.30	.0254	.0076	-.0088	.0068	-.0020	.0054
12.34	.0254	.0081	-.0103	.0061	-.0025	.0065
14.39	-.0064	.0018	-.0078	.0050	-.0025	.0073
16.42	.0025	.0043	-.0056	.0047	-.0026	.0086
18.46	-.0197	-.0034	-.0060	.0037	-.0025	.0071
20.47	-.0247	-.0037	-.0071	.0031	-.0026	.0070
23.48	-.0246	-.0045	-.0022	.0028	-.0024	.0033
			δ = 12.0			
- 2.01	.0970	.0010	-.0339	.0191	-.0007	.0046
.04	.0974	.0032	-.0339	.0192	-.0014	.0058
2.10	.1114	.0058	-.0328	.0188	-.0020	.0045
4.16	.1210	.0095	-.0335	.0181	-.0029	.0042
6.21	.1077	.0130	-.0282	.0179	-.0038	.0039
8.27	.1118	.0193	-.0215	.0162	-.0037	.0050
10.33	.1019	.0228	-.0102	.0095	-.0040	.0040
12.37	.0969	.0259	-.0112	.0093	-.0047	.0050
14.42	.0738	.0245	-.0087	.0084	-.0051	.0059
16.45	.0728	.0281	-.0072	.0078	-.0054	.0070
18.50	.0492	.0233	-.0070	.0054	-.0048	.0055
20.48	.0124	.0148	-.0113	.0053	-.0053	.0052
23.51	.0329	.0236	-.0018	.0034	-.0038	.0031
			δ = 16.0			
- 2.02	.1080	.0035	-.0467	.0259	-.0013	.0051
.04	.1081	.0042	-.0495	.0258	-.0021	.0088
2.09	.1361	.0073	-.0474	.0249	-.0026	.0077
4.15	.1228	.0109	-.0492	.0247	-.0040	.0071
6.21	.1235	.0161	-.0436	.0235	-.0052	.0092
8.27	.1224	.0218	-.0351	.0203	-.0046	.0118
10.32	.0890	.0228	-.0220	.0118	-.0049	.0091
12.37	.0889	.0264	-.0219	.0108	-.0057	.0112
14.40	.0523	.0214	-.0191	.0097	-.0061	.0119
16.43	.0381	.0204	-.0172	.0090	-.0065	.0129
18.49	.0505	.0270	-.0140	.0068	-.0061	.0116
20.48	.0135	.0193	-.0234	.0067	-.0071	.0124
23.49	-.0011	.0118	-.0147	.0038	-.0044	.0117
			δ = 30.6			
.06	.2041	.0242	-.0889	.0437	-.0075	.0213
2.12	.2275	.0281	-.0858	.0430	-.0090	.0224
4.17	.2322	.0369	-.0854	.0419	-.0109	.0230
6.23	.2131	.0438	-.0777	.0377	-.0125	.0247
8.30	.1779	.0457	-.0611	.0304	-.0111	.0257
10.33	.1303	.0478	-.0426	.0213	-.0121	.0213
12.34	.0458	.0336	-.0398	.0152	-.0118	.0254
14.42	.0913	.0513	-.0326	.0143	-.0133	.0274
16.44	.0759	.0509	-.0307	.0125	-.0133	.0284
18.48	.0378	.0429	-.0315	.0099	-.0128	.0269
20.50	.0170	.0395	-.0021	.0097	-.0143	.0275
23.50	.0432	.0530	-.0246	.0074	-.0141	.0276

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.05	-.0253	.0018	.0246	-.0091	-.0003	-.0001
- .01	-.0474	.0008	.0199	-.0092	-.0003	.0010
2.04	-.0318	-.0004	.0195	-.0091	-.0002	.0023
4.10	-.0206	-.0015	.0194	-.0094	.0002	.0024
6.16	-.0330	-.0041	.0203	-.0088	.0009	.0015
8.23	-.0268	-.0041	.0170	-.0057	.0020	.0024
10.29	-.0110	-.0023	.0175	-.0060	.0016	-.0003
12.34	.0043	-.0009	.0181	-.0066	.0020	.0024
14.39	-.0121	-.0051	.0161	-.0050	.0018	.0023
16.43	-.0018	-.0029	.0163	-.0040	.0019	.0025
18.46	-.0323	-.0132	.0131	-.0040	.0022	-.0001
20.45	-.0563	-.0266	.0071	-.0022	.0014	-.0002
23.48	-.0189	-.0120	.0154	-.0007	.0003	-.0040
			δ = -10.5			
- 2.06	-.0596	.0047	.0372	-.0187	-.0011	.0035
- .03	-.0911	.0032	.0339	-.0188	-.0006	.0071
2.03	-.0751	.0008	.0342	-.0184	-.0002	.0085
4.09	-.0685	-.0011	.0329	-.0188	.0004	.0086
6.16	-.0665	-.0042	.0314	-.0175	.0013	.0091
8.22	-.0646	-.0075	.0277	-.0136	.0029	.0090
10.28	-.0488	-.0071	.0232	-.0131	.0029	.0053
12.33	-.0241	-.0054	.0224	-.0123	.0036	.0084
14.38	-.0354	-.0106	.0215	-.0109	.0039	.0085
16.41	-.0342	-.0121	.0195	-.0090	.0044	.0089
18.45	-.0461	-.0187	.0156	-.0092	.0051	.0064
20.46	-.0447	-.0203	.0075	-.0060	.0047	.0056
23.49	-.0012	-.0286	.0183	-.0030	.0026	.0016
			δ = -14.5			
- 2.05	-.0924	.0083	.0555	-.0246	-.0020	.0048
- .02	-.1192	.0068	.0554	-.0257	-.0013	.0071
2.04	-.0887	.0040	.0560	-.0256	-.0009	.0084
4.10	-.0912	.0008	.0563	-.0260	-.0001	.0110
6.15	-.0991	-.0049	.0554	-.0256	.0018	.0118
8.21	-.0874	-.0077	.0488	-.0211	.0033	.0104
10.27	-.0575	-.0062	.0419	-.0186	.0037	.0073
12.33	-.0323	-.0058	.0396	-.0177	.0045	.0090
14.38	-.0529	-.0136	.0380	-.0154	.0052	.0081
16.42	-.0331	-.0112	.0354	-.0135	.0058	.0073
18.45	-.0405	-.0161	.0318	-.0129	.0066	.0038
20.46	-.0442	-.0188	.0211	-.0091	.0068	.0046
23.49	-.0382	-.0229	.0330	-.0049	.0044	.0005
			δ = -29.3			
- 2.10	-.1895	.0262	.0844	-.0424	-.0073	.0135
- .04	-.2119	.0227	.0855	-.0450	-.0064	.0143
2.00	-.2057	.0178	.0921	-.0480	-.0056	.0137
4.05	-.2085	.0109	.0924	-.0480	-.0041	.0165
6.11	-.2076	.0015	.0922	-.0480	-.0010	.0177
8.18	-.1920	-.0066	.0831	-.0434	.0020	.0157
10.24	-.1625	-.0116	.0704	-.0376	.0041	.0124
12.28	-.1420	-.0176	.0621	-.0351	.0058	.0108
14.35	-.1527	-.0284	.0612	-.0318	.0073	.0078
16.38	-.1414	-.0341	.0535	-.0286	.0086	.0074
18.42	-.1248	-.0379	.0461	-.0249	.0097	.0034
20.43	-.1354	-.0505	.0353	-.0184	.0102	.0008
23.44	-.1430	-.0654	.0418	-.0153	.0104	-.0053



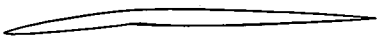
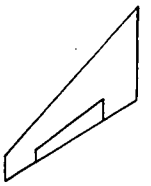


TABLE 2.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.40 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.03	.0580	-.0013	-.0149	.0100	.0003	.0028
.03	.0532	.0004	-.0182	.0097	-.0002	.0013
2.08	.0630	.0023	-.0175	.0101	-.0005	.0014
4.14	.0584	.0038	-.0171	.0103	-.0009	.0001
6.20	.0587	.0048	-.0171	.0102	-.0012	-.0000
8.25	.0634	.0088	-.0146	.0094	-.0018	.0009
10.31	.0448	.0083	-.0111	.0085	-.0022	.0007
12.35	.0541	.0111	-.0104	.0073	-.0024	.0017
14.39	.0302	.0099	-.0065	.0052	-.0023	-.0000
16.43	.0298	.0114	-.0080	.0049	-.0025	.0025
18.48	.0469	.0195	-.0058	.0034	-.0023	.0024
20.48	.0097	.0106	-.0015	.0003	-.0017	.0019
23.51	.0088	.0103	-.0058	.0012	-.0011	.0165
			δ = 12.0			
- 2.00	.1159	-.0006	-.0355	.0191	-.0002	-.0065
.04	.1015	.0023	-.0402	.0188	-.0009	-.0041
2.09	.1016	.0051	-.0403	.0191	-.0015	-.0041
4.15	.0967	.0078	-.0392	.0185	-.0020	-.0055
6.21	.0876	.0090	-.0385	.0180	-.0027	-.0058
8.26	.1062	.0157	-.0349	.0166	-.0036	-.0050
10.32	.0735	.0146	-.0275	.0148	-.0041	-.0041
12.34	.0635	.0173	-.0247	.0110	-.0046	-.0024
14.38	.0210	.0119	-.0187	.0082	-.0044	-.0030
16.43	.0295	.0161	-.0187	.0068	-.0046	-.0007
18.45	.0101	.0132	-.0173	.0048	-.0044	-.0023
20.49	.0138	.0169	-.0069	.0003	-.0037	-.0029
23.50	-.0160	.0060	-.0162	.0015	-.0015	-.0042
			δ = 16.0			
- 2.00	.1078	.0025	-.0456	.0247	-.0002	.0043
.05	.1500	.0050	-.0473	.0245	-.0012	.0043
2.11	.1312	.0081	-.0452	.0245	-.0018	.0068
4.16	.1261	.0114	-.0477	.0242	-.0026	.0053
6.20	.1076	.0126	-.0414	.0227	-.0034	.0049
8.26	.1212	.0205	-.0388	.0212	-.0044	.0070
10.34	.1209	.0255	-.0289	.0184	-.0051	.0064
12.36	.0776	.0237	-.0300	.0139	-.0057	.0066
14.39	.0435	.0208	-.0218	.0102	-.0048	.0063
16.44	.0515	.0297	-.0190	.0082	-.0058	.0094
18.47	.0467	.0275	-.0179	.0057	-.0058	.0103
20.49	.0088	.0198	-.0058	-.0016	-.0044	.0091
23.50	-.0113	.0122	-.0158	.0025	-.0035	.0105
			δ = 30.6			
- 2.00	.1765	.0168	-.0889	.0445	-.0050	.0107
.05	.2043	.0222	-.0889	.0443	-.0064	.0145
2.11	.2132	.0256	-.0824	.0429	-.0074	.0143
4.17	.1746	.0276	-.0803	.0406	-.0086	.0125
6.23	.1695	.0334	-.0758	.0385	-.0101	.0119
8.27	.1641	.0387	-.0704	.0369	-.0113	.0140
10.33	.1356	.0409	-.0584	.0326	-.0126	.0129
12.35	.1047	.0443	-.0548	.0230	-.0130	.0177
14.38	.0377	.1170	-.0441	.0182	-.0133	.0167
16.43	.0555	.0426	-.0421	.0145	-.0135	.0186
18.47	.0399	.0432	-.0295	.0087	-.0130	.0191
20.49	.0230	.0465	-.0170	-.0025	-.0119	.0222
23.49	-.0121	.0307	-.0338	.0042	-.0099	.0223

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.05	-.0391	.0035	.0221	-.0099	-.0003	-.0040
- .02	-.0439	.0009	.0239	-.0118	-.0000	-.0081
2.04	-.0476	-.0002	.0256	-.0112	.0003	-.0080
4.10	-.0471	-.0007	.0249	-.0113	.0007	-.0079
6.17	-.0463	-.0016	.0262	-.0116	.0011	-.0066
8.23	-.0316	-.0025	.0245	-.0112	.0015	-.0064
10.29	-.0212	-.0024	.0287	-.0107	.0022	-.0060
12.34	-.0068	-.0010	.0240	-.0098	.0025	-.0058
14.38	-.0290	-.0066	.0258	-.0077	.0028	-.0069
16.41	-.0373	-.0103	.0222	-.0073	.0028	-.0069
18.45	-.0180	-.0069	.0215	-.0059	.0027	-.0079
20.49	.0051	-.0010	.0233	-.0046	.0025	-.0076
23.51	-.0035	-.0039	.0149	-.0026	.0025	-.0098
			δ = -10.5			
- 2.06	-.0864	.0070	.0400	-.0192	-.0019	-.0024
- .03	-.0916	.0043	.0418	-.0218	-.0009	.0002
2.05	-.0813	.0016	.0417	-.0217	-.0002	.0005
4.09	-.0944	-.0000	.0413	-.0213	.0002	.0005
6.14	-.0935	-.0034	.0405	-.0214	.0010	.0006
8.22	-.0692	-.0053	.0395	-.0216	.0021	.0022
10.27	-.0816	-.0114	.0397	-.0192	.0029	.0015
12.31	-.0622	-.0116	.0339	-.0179	.0036	.0019
14.37	-.0747	-.0181	.0328	-.0144	.0045	.0001
16.41	-.0457	-.0134	.0300	-.0123	.0046	-.0007
18.45	-.0262	-.0111	.0257	-.0109	.0048	-.0017
20.49	-.0172	-.0093	.0128	-.0074	.0048	-.0022
23.50	-.0193	-.0150	.0184	-.0050	.0051	-.0067
			δ = -14.5			
- 2.06	-.1107	.0105	.0514	-.0238	-.0028	-.0021
- .04	-.1346	.0060	.0473	-.0255	-.0017	.0030
2.01	-.1278	.0037	.0511	-.0245	-.0009	.0034
4.07	-.1359	.0008	.0511	-.0250	-.0003	.0033
6.14	-.1296	-.0025	.0520	-.0256	.0006	.0047
8.19	-.1283	-.0092	.0491	-.0253	.0019	.0050
10.25	-.1353	-.0164	.0474	-.0226	.0029	.0031
12.30	-.0962	-.0175	.0424	-.0206	.0042	.0027
14.35	-.1031	-.0238	.0395	-.0162	.0046	.0009
16.39	-.0870	-.0249	.0341	-.0138	.0050	-.0012
18.42	-.0759	-.0265	.0283	-.0110	.0050	-.0019
20.46	-.0649	-.0280	.0233	-.0074	.0053	-.0023
23.49	-.0491	-.0302	.0154	-.0030	.0057	-.0074
			δ = -29.3			
- 2.12	-.2511	.0326	.0850	-.0445	-.0084	.0059
- .08	-.2557	.0244	.0846	-.0445	-.0068	.0114
4.03	-.2821	.0116	.0924	-.0482	-.0045	.0083
6.08	-.2806	.0034	.0929	-.0480	-.0029	.0112
8.15	-.2566	-.0058	.0897	-.0479	-.0000	.0135
10.19	-.2736	-.0221	.0865	-.0457	.0027	.0095
12.26	-.2246	-.0288	.0751	-.0408	.0047	.0073
14.30	-.2216	-.0411	.0707	-.0345	.0065	.0038
16.36	-.1950	-.0467	.0573	-.0281	.0069	.0012
18.39	-.1650	-.0479	.0480	-.0231	.0078	-.0014
20.44	-.1258	-.0471	.0366	-.0172	.0089	-.0033
23.47	-.1185	-.0586	.0236	-.0094	.0108	-.0098



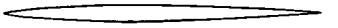
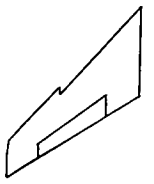


TABLE 3.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.25$; M = 0.60

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.07	.0368	.0010	-.0216	.0107	-.0000	.0047
.01	.0371	.0020	-.0235	.0110	-.0003	.0039
2.09	.0397	.0026	-.0233	.0109	-.0007	.0038
4.18	.0376	.0039	-.0242	.0105	-.0011	.0042
6.27	.0356	.0049	-.0219	.0098	-.0014	.0047
8.36	.0266	.0052	-.0183	.0087	-.0017	.0043
10.45	-.0037	.0018	-.0124	.0060	-.0020	.0031
12.54	.0221	.0081	-.0114	.0055	-.0023	.0049
14.60	.0038	.0042	-.0108	.0052	-.0025	.0047
16.64	-.0123	-.0000	-.0106	.0043	-.0026	.0045
18.65	.0029	.0057	-.0093	.0034	-.0022	.0047
20.66	.0104	.0086	-.0092	.0045	-.0035	.0050
23.61	-.1171	-.0463	-.0170	.0026	-.0027	.0070
			δ = 12.0			
- 2.03	.1145	.0007	-.0377	.0192	-.0006	.0069
.06	.1101	.0033	-.0385	.0193	-.0012	.0041
2.14	.1152	.0051	-.0385	.0191	-.0018	.0039
4.22	.1156	.0096	-.0382	.0184	-.0026	.0041
6.31	.1164	.0145	-.0329	.0171	-.0035	.0055
8.41	.1046	.0180	-.0230	.0153	-.0035	.0052
10.47	.0431	.0131	-.0140	.0084	-.0038	.0034
12.19	-.4251	-.0891	-.0527	.0087	-.0045	.0029
14.63	.0524	.0204	-.0129	.0087	-.0049	.0056
16.67	.0356	.0182	-.0123	.0073	-.0049	.0053
18.65	.0154	.0158	-.0210	.0062	-.0049	.0059
20.68	.0548	.0287	-.0136	.0064	-.0059	.0071
23.73	.0369	.0255	-.0114	.0038	-.0044	.0080
			δ = 16.0			
- 2.03	.1348	.0028	-.0550	.0261	-.0011	.0101
.05	.1350	.0056	-.0565	.0259	-.0018	.0092
2.14	.1396	.0285	-.0530	.0247	-.0027	.0081
4.22	.1386	.0133	-.0543	.0246	-.0038	.0076
6.31	.1249	.0174	-.0465	.0213	-.0047	.0101
8.41	.1178	.0217	-.0355	.0189	-.0046	.0085
10.48	.0537	.0171	-.0230	.0104	-.0047	.0071
12.57	.0702	.0243	-.0228	.0107	-.0056	.0100
14.61	.0421	.0201	-.0246	.0103	-.0061	.0104
16.65	.0164	.0147	-.0226	.0085	-.0061	.0101
20.68	.0589	.0336	-.0200	.0081	-.0081	.0128
23.72	.0174	.0200	-.0176	.0054	-.0070	.0147
			δ = 30.6			
.08	.2225	.0236	-.0883	.0405	-.0071	.0213
2.16	.2254	.0287	-.0882	.0404	-.0088	.0207
4.26	.2255	.0370	-.0864	.0388	-.0105	.0231
6.36	.2257	.0460	-.0739	.0330	-.0124	.0248
8.43	.1693	.0479	-.0539	.0254	-.0113	.0242
10.49	.0997	.0421	-.0393	.0167	-.0111	.0217
12.57	.0732	.0415	-.0365	.0151	-.0117	.0225
14.61	.0606	.0429	-.0371	.0142	-.0125	.0228
16.65	.0360	.0384	-.0370	.0114	-.0122	.0239
18.66	.0506	.0490	-.0444	.0124	-.0144	.0259
20.67	.0810	.0613	-.0325	.0117	-.0166	.0289
23.72	.0484	.0536	-.0274	.0068	-.0146	.0316

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.08	.2233	.0005	.0022	-.0101	.0001	.0026
- .00	-.0367	.0011	.0198	-.0099	-.0001	.0004
4.17	-.0324	-.0017	.0184	-.0098	.0006	.0021
6.26	-.0300	-.0030	.0167	-.0089	.0011	.0011
8.35	-.0230	-.0032	.0167	-.0068	.0019	.0012
10.45	-.0298	-.0059	.0148	-.0063	.0015	-.0009
12.52	-.0398	-.0095	.0134	-.0055	.0019	.0006
14.59	-.0380	-.0112	.0124	-.0044	.0021	.0001
16.65	-.0250	-.0088	.0109	-.0047	.0022	-.0005
18.63	-.0322	-.0108	.0004	-.0035	.0021	-.0004
20.63	-.0269	-.0125	.0086	-.0018	.0009	-.0001
23.70	-.0147	-.0091	.0074	-.0007	-.0003	.0029
			δ = -10.5			
- 2.10	-.0756	.0055	.0354	-.0189	-.0010	.0027
- .02	-.0806	.0033	.0365	-.0195	-.0006	.0040
2.06	-.0783	.0007	.0352	-.0187	-.0002	.0042
4.15	-.0764	-.0021	.0354	-.0193	.0008	.0052
6.24	-.0737	-.0048	.0338	-.0177	.0015	.0044
8.34	-.0599	-.0066	.0274	-.0148	.0029	.0043
10.43	-.0618	-.0101	.0241	-.0129	.0028	.0025
12.52	-.0574	-.0132	.0230	-.0117	.0035	.0030
14.51	-.1373	-.0370	.0144	-.0100	.0039	.0015
16.63	-.0677	-.0222	.0177	-.0095	.0044	.0015
18.63	-.0449	-.0162	.0075	-.0076	.0049	.0014
20.63	-.0233	-.0128	.0119	-.0049	.0032	.0004
23.69	-.0264	-.0159	.0137	-.0032	.0021	.0034
			δ = -14.5			
- 2.10	-.0945	.0089	.0529	-.0242	-.0019	.0047
- .01	-.1091	.0063	.0551	-.0257	-.0014	.0053
2.07	-.1018	.0033	.0545	-.0254	-.0009	.0055
4.15	-.0996	.0002	.0551	-.0258	.0003	.0073
6.24	-.0973	-.0044	.0545	-.0249	.0019	.0068
8.34	-.0879	-.0076	.0463	-.0212	.0034	.0047
10.43	-.0920	-.0129	.0384	-.0174	.0034	.0020
12.53	-.0521	-.0097	.0391	-.0167	.0046	.0015
14.59	-.0571	-.0146	.0350	-.0143	.0051	.0013
16.62	-.0786	-.0238	.0303	-.0136	.0057	-.0012
18.65	-.0329	-.0112	.0208	-.0107	.0066	-.0008
20.64	-.0248	-.0123	.0237	-.0075	.0046	-.0026
23.68	-.0620	-.0319	.0259	-.0045	.0031	.0014
			δ = -29.3			
- .05	-.2019	.0247	.0880	-.0422	-.0066	.0127
2.03	-.2071	.0202	.0963	-.0459	-.0062	.0129
4.11	-.2130	.0127	.0938	-.0453	-.0041	.0158
6.20	-.2146	.0025	.0952	-.0465	-.0009	.0145
8.30	-.1965	-.0054	.0852	-.0420	.0019	.0106
10.38	-.1895	-.0158	.0706	-.0363	.0034	.0051
12.46	-.1801	-.0258	.0638	-.0328	.0054	.0045
14.55	-.1428	-.0258	.0586	-.0301	.0069	.0025
16.60	-.1403	-.0345	.0486	-.0260	.0080	-.0005
18.61	-.1156	-.0344	.0379	-.0199	.0083	-.0035
20.63	-.0713	-.0240	.0427	-.0170	.0072	-.0062
23.68	-.0778	-.0435	.0418	-.0161	.0087	-.0063



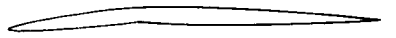
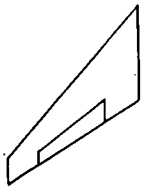


TABLE 3.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2} = 0.25$; M = 0.60 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7							δ = -5.1			
- 2.05	.0370	-.0010	-.0212	.0110	.0004	.0016	- 2.07	-.0563	.0033	.0229	-.0103	-.0006	-.0031
.02	.0494	.0008	-.0188	.0105	-.0003	-.0006	- .00	-.0438	.0016	.0249	-.0105	-.0001	-.0042
2.11	.0684	.0020	-.0195	.0102	-.0005	.0001	2.09	-.0238	.0005	.0256	-.0100	.0001	-.0045
4.20	.0590	.0038	-.0188	.0103	-.0008	.0005	4.17	-.0399	-.0002	.0254	-.0104	.0004	-.0040
6.30	.0545	.0057	-.0184	.0101	-.0013	.0010	6.26	-.0536	-.0026	.0253	-.0105	.0010	-.0038
8.38	.0497	.0072	-.0159	.0093	-.0016	.0014	8.35	-.0388	-.0023	.0257	-.0103	.0015	-.0041
10.46	.0428	.0085	-.0140	.0083	-.0021	.0010	10.45	-.0278	-.0079	.0231	-.0090	.0021	-.0036
12.53	.0381	.0095	-.0114	.0073	-.0024	.0020	12.52	-.0088	-.0026	.0209	-.0089	.0023	-.0048
14.57	.0258	.0096	-.0073	.0050	-.0025	.0016	14.56	-.0081	-.0013	.0180	-.0057	.0019	-.0052
16.63	.0254	.0105	-.0058	.0040	-.0023	.0023	16.62	-.0305	-.0089	.0184	-.0057	.0021	-.0065
18.67	.0018	.0051	-.0023	.0025	-.0019	.0021	18.69	.0043	.0010	.0153	-.0050	.0023	-.0063
20.69	.0173	.0111	-.0006	-.0003	-.0015	.0026	20.69	.0065	-.0017	.0160	-.0019	.0013	-.0062
23.71	.0226	.0143	-.0044	.0011	-.0012	.0004	23.72	.0067	.0005	.0134	-.0046	.0031	-.0105
			δ = 12.0							δ = -10.5			
- 2.04	.0812	-.0002	-.0429	.0195	-.0000	.0025	- 2.11	-.1165	.0082	.0394	-.0191	-.0018	.0013
.04	.0984	.0027	-.0402	.0188	-.0010	-.0010	- .03	-.0922	.0041	.0402	-.0197	-.0010	.0018
2.12	.1153	.0053	-.0404	.0190	-.0014	-.0004	2.06	-.0840	.0018	.0428	-.0195	-.0004	.0001
4.21	.1011	.0079	-.0390	.0182	-.0019	-.0009	4.15	-.0902	-.0004	.0422	-.0199	.0001	.0008
6.31	.0895	.0105	-.0388	.0175	-.0027	-.0006	6.24	-.1015	-.0038	.0420	-.0202	.0011	.0012
8.39	.0872	.0144	-.0339	.0158	-.0034	.0009	8.32	-.0939	-.0070	.0414	-.0205	.0024	.0011
10.46	.0685	.0146	-.0289	.0132	-.0041	.0002	10.41	-.0946	-.0146	.0360	-.0174	.0033	-.0001
12.53	.0742	.0232	-.0280	.0115	-.0045	.0018	12.49	-.0556	-.0119	.0313	-.0161	.0038	-.0008
14.58	.0544	.0238	-.0186	.0074	-.0044	.0012	14.55	-.0427	-.0108	.0286	-.0122	.0038	-.0016
16.63	.0307	.0194	-.0168	.0063	-.0044	.0017	16.60	-.0531	-.0158	.0255	-.0104	.0041	-.0032
18.67	.0249	.0210	-.0129	.0036	-.0040	.0021	18.65	-.0360	-.0142	.0199	-.0093	.0045	-.0036
20.68	.0118	.0205	.0007	-.0048	-.0023	.0033	20.69	-.0154	-.0110	.0213	-.0056	.0037	-.0045
23.71	.0278	.0254	-.0151	.0008	-.0022	-.0007	23.69	-.0266	-.0166	.0195	-.0067	.0046	-.0078
			δ = 16.0							δ = -14.5			
- 2.03	.1088	.0013	-.0536	.0252	-.0003	.0090	- 2.13	-.1556	.0121	.0520	-.0245	-.0028	.0025
.05	.1358	.0050	-.0497	.0249	-.0015	.0048	- .04	-.1380	.0068	.0532	-.0250	-.0018	.0024
2.14	.1452	.0078	-.0494	.0244	-.0020	.0053	2.04	-.1243	.0037	.0551	-.0245	-.0011	.0015
4.22	.1239	.0112	-.0467	.0233	-.0029	.0046	4.13	-.1346	.0009	.0552	-.0248	-.0004	.0021
6.31	.1169	.0146	-.0466	.0223	-.0038	.0061	6.22	-.1474	-.0040	.0547	-.0242	.0006	.0020
8.41	.1358	.0224	-.0444	.0207	-.0050	.0068	8.30	-.1388	-.0094	.0537	-.0238	.0019	.0007
10.48	.0935	.0208	-.0329	.0173	-.0057	.0071	10.40	-.1270	-.0170	.0488	-.0210	.0031	-.0009
12.54	.0893	.0293	-.0312	.0152	-.0061	.0087	12.48	-.0833	-.0122	.0390	-.0182	.0038	-.0020
14.58	.0690	.0307	-.0229	.0099	-.0061	.0086	14.54	-.0744	-.0138	.0363	-.0139	.0039	-.0020
16.65	.0610	.0316	-.0195	.0077	-.0059	.0085	16.57	-.0956	-.0243	.0308	-.0106	.0040	-.0036
18.69	.0478	.0323	-.0147	.0040	-.0055	.0087	18.63	-.0828	-.0250	.0276	-.0104	.0050	-.0046
20.70	.0230	.0288	-.0038	-.0033	-.0042	.0113	20.65	-.0597	-.0243	.0263	-.0067	.0050	-.0058
23.73	.0498	.0394	-.0158	.0016	-.0041	.0078	23.69	-.0501	-.0236	.0256	-.0078	.0059	-.0114
			δ = 30.6							δ = -29.3			
- 2.01	.1855	.0162	-.0901	.0429	-.0049	.0165	- 2.17	-.2632	.0341	.0840	-.0415	-.0086	.0115
.08	.2142	.0219	-.0860	.0419	-.0065	.0155	- .08	-.2409	.0264	.0882	-.0428	-.0074	.0120
2.16	.2158	.0258	-.0838	.0400	-.0074	.0150	2.00	-.2404	.0200	.0906	-.0433	-.0057	.0120
4.25	.2014	.0304	-.0802	.0386	-.0089	.0148	4.08	-.2560	.0141	.0939	-.0456	-.0047	.0105
6.33	.1869	.0368	-.0791	.0374	-.0105	.0159	6.07	-.4067	-.0096	.0846	-.0466	-.0031	.0108
8.42	.1882	.0460	-.0739	.0326	-.0120	.0180	8.26	-.2593	-.0053	.0966	-.0480	-.0000	.0090
10.49	.1570	.0470	-.0629	.0286	-.0131	.0183	10.34	-.2453	-.0191	.0898	-.0442	.0026	.0056
12.53	.1141	.0507	-.0508	.0225	-.0130	.0201	12.42	-.2064	-.0207	.0752	-.0403	.0041	.0030
14.58	.0763	.0489	-.0438	.0155	-.0128	.0206	14.48	-.1826	-.0283	.0644	-.0318	.0054	.0009
16.64	.0448	.0430	-.0335	.0113	-.0123	.0196	16.56	-.1425	-.0290	.0517	-.0241	.0061	-.0039
18.67	.0268	.0430	-.0199	.0038	-.0116	.0192	18.59	-.1474	-.0390	.0463	-.0212	.0073	-.0052
20.69	.0362	.0516	-.0194	.0014	-.0123	.0245	20.64	-.1058	-.0350	.0433	-.0169	.0081	-.0078
23.72	.0402	.0533	-.0328	.0054	-.0130	.0220	23.67	-.0919	-.0403	.0387	-.0137	.0092	-.0180



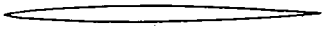
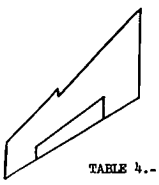


TABLE 4.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.25$; M = 0.70

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.08	.0334	.0009	-.0233	.0106	-.0000	.0029
- .00	.0336	.0018	-.0251	.0111	-.0003	.0034
2.10	.0376	.0025	-.0237	.0102	-.0006	.0037
4.22	.0362	.0040	-.0250	.0106	-.0012	.0034
6.32	-.0540	-.0058	-.0287	.0095	-.0014	.0038
8.43	.0351	.0068	-.0158	.0079	-.0017	.0029
10.53	.0217	.0066	-.0144	.0055	-.0019	.0034
12.62	.0271	.0090	-.0174	.0054	-.0023	.0049
14.59	-.0688	-.0150	-.0224	.0049	-.0025	.0047
16.72	.0216	.0101	-.0117	.0042	-.0025	.0062
18.71	.0026	.0056	-.0132	.0036	-.0023	.0062
20.73	.0139	.0096	-.0115	.0037	-.0030	.0059
23.80	-.0057	.0022	-.0111	.0028	-.0030	.0027
			δ = 12.0			
- 2.03	.1167	.0006	-.0412	.0194	-.0006	.0076
.06	.1152	.0033	-.0420	.0197	-.0012	.0038
2.16	.1155	.0053	-.0401	.0186	-.0017	.0034
4.25	.1162	.0101	-.0404	.0185	-.0027	.0039
6.37	.0223	.0038	-.0426	.0165	-.0035	.0054
8.46	.0944	.0171	-.0224	.0148	-.0035	.0050
10.56	.0613	.0175	-.0173	.0078	-.0038	.0050
12.64	.0578	.0185	-.0204	.0096	-.0045	.0064
14.71	.0631	.0231	-.0167	.0087	-.0048	.0067
16.75	.0599	.0255	-.0171	.0069	-.0046	.0083
18.74	.0491	.0256	-.0231	.0062	-.0047	.0083
20.76	.0604	.0311	-.0177	.0059	-.0057	.0083
23.82	.0299	.0216	-.0143	.0029	-.0038	.0071
			δ = 16.0			
- 2.04	.1370	.0026	-.0580	.0261	-.0012	.0086
.04	.1373	.0058	-.0610	.0261	-.0020	.0073
2.16	.1358	.0083	-.0549	.0237	-.0026	.0073
4.26	.1387	.0136	-.0545	.0237	-.0039	.0076
6.36	.0294	.0060	-.0527	.0204	-.0043	.0080
8.48	.1014	.0206	-.0295	.0157	-.0046	.0083
10.56	.0682	.0213	-.0241	.0091	-.0047	.0089
12.64	.0686	.0236	-.0278	.0112	-.0057	.0102
14.69	.0532	.0233	-.0265	.0103	-.0060	.0110
16.74	.0614	.0287	-.0238	.0082	-.0059	.0120
18.73	.0384	.0242	-.0273	.0076	-.0062	.0113
20.75	.0694	.0375	-.0247	.0075	-.0077	.0134
23.82	.0327	.0263	-.0181	.0050	-.0070	.0137
			δ = 30.6			
- 2.00	.2355	.0191	-.0906	.0408	-.0061	.0235
.10	.2292	.0241	-.0891	.0390	-.0070	.0209
2.19	.2239	.0288	-.0876	.0380	-.0086	.0211
4.30	.2261	.0378	-.0884	.0365	-.0105	.0230
6.40	.1109	.0344	-.0799	.0299	-.0121	.0246
8.49	.1603	.0486	-.0508	.0231	-.0113	.0230
10.57	.1075	.0456	-.0418	.0157	-.0111	.0232
12.65	.0956	.0470	-.0435	.0159	-.0119	.0234
14.70	.0810	.0478	-.0401	.0131	-.0118	.0236
16.75	.0809	.0525	-.0402	.0117	-.0120	.0246
18.73	.0603	.0492	-.0414	.0118	-.0137	.0270
20.77	.0932	.0648	-.0360	.0113	-.0163	.0296
23.83	.0478	.0523	-.0286	.0068	-.0153	.0314

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.10	-.0320	.0021	.0202	-.0097	-.0003	-.0011
- .01	-.0392	.0010	.0198	-.0098	-.0002	.0001
2.10	-.0290	-.0004	.0199	-.0098	.0001	.0007
4.21	-.0284	-.0012	.0198	-.0098	.0006	.0015
6.30	-.1160	-.0123	.0108	-.0089	.0006	.0001
8.41	-.0342	-.0040	.0227	-.0070	.0017	-.0002
10.52	-.0170	-.0036	.0145	-.0058	.0015	-.0006
12.60	-.0153	-.0044	.0124	-.0054	.0017	.0001
14.66	-.0268	-.0084	.0112	-.0044	.0019	.0001
16.72	-.0058	-.0021	.0097	-.0047	.0021	.0014
18.71	-.0124	-.0042	.0004	-.0029	.0010	.0005
20.74	.0082	.0012	.0068	-.0021	.0003	.0018
23.79	-.0159	-.0096	.0077	-.0013	.0001	.0033
			δ = -10.5			
- 2.11	-.0708	.0052	.0352	-.0184	-.0011	.0009
- .02	-.0840	.0031	.0376	-.0194	-.0007	.0036
2.09	-.0778	.0007	.0374	-.0192	-.0002	.0039
4.19	-.0737	-.0018	.0383	-.0194	.0008	.0048
6.29	-.1618	-.0150	.0278	-.0180	.0015	.0028
8.41	-.0558	-.0050	.0353	-.0158	.0030	.0019
10.52	-.0383	-.0061	.0246	-.0123	.0028	.0018
12.60	-.0380	-.0211	.0208	-.0113	.0034	.0027
14.67	-.0259	-.0078	.0187	-.0105	.0039	.0004
16.71	-.0253	-.0083	.0159	-.0098	.0044	.0017
18.68	-.0382	-.0158	.0066	-.0065	.0034	.0004
20.72	-.0032	-.0047	.0114	-.0049	.0025	.0018
23.80	-.0272	-.0162	.0142	-.0043	.0028	.0030
			δ = -14.5			
- 2.10	-.0900	.0089	.0490	-.0240	-.0020	.0028
- .01	-.1066	.0064	.0575	-.0260	-.0015	.0043
2.08	-.1060	.0033	.0580	-.0261	-.0008	.0051
4.18	-.1018	-.0004	.0580	-.0262	.0004	.0057
6.29	-.1899	-.0146	.0472	-.0247	.0015	.0039
8.40	-.0875	-.0070	.0517	-.0214	.0033	.0022
10.52	-.0625	-.0079	.0394	-.0182	.0036	.0008
12.60	-.0585	-.0117	.0351	-.0159	.0043	.0014
14.66	-.0530	-.0134	.0326	-.0144	.0050	.0002
16.71	-.0338	-.0097	.0271	-.0131	.0056	.0002
18.72	-.0279	-.0059	.0189	-.0097	.0046	-.0020
20.73	-.0060	-.0046	.0227	-.0076	.0039	-.0011
23.81	-.0170	-.0108	.0255	-.0059	.0037	.0006
			δ = -29.3			
- 2.14	-.1783	.0288	.0821	-.0384	-.0077	.0099
- .04	-.1895	.0262	.0873	-.0398	-.0071	.0131
2.05	-.1897	.0206	.0901	-.0416	-.0059	.0139
4.15	-.1997	.0131	.0908	-.0423	-.0040	.0136
6.26	-.2816	-.0061	.0809	-.0420	-.0010	.0107
8.36	-.1702	-.0028	.0780	-.0356	.0020	.0074
10.47	-.1527	-.0100	.0668	-.0323	.0029	.0026
12.65	-.0467	.0049	.0706	-.0317	.0044	.0035
14.64	-.1187	-.0190	.0550	-.0282	.0057	-.0002
16.69	-.0911	-.0176	.0448	-.0236	.0064	-.0008
18.69	-.0834	-.0192	.0386	-.0191	.0055	-.0035
20.72	-.0494	-.0115	.0438	-.0173	.0048	-.0037
23.78	-.0914	-.0343	.0461	-.0167	.0070	-.0056



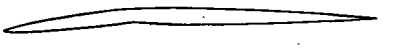
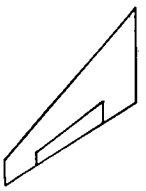


TABLE 4.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.70 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.06	.0547	-.0015	-.0208	.0108	.0004	.0028
.02	.0532	.0006	-.0198	.0103	-.0003	-.0002
2.13	.0591	.0026	-.0200	.0103	-.0006	.0002
4.23	.0687	.0051	-.0193	.0106	-.0009	.0007
6.34	.0462	.0051	-.0184	.0103	-.0014	.0007
8.44	.0610	.0091	-.0187	.0085	-.0017	.0009
10.53	.0497	.0112	-.0124	.0078	-.0020	.0013
12.61	.0512	.0132	-.0125	.0057	-.0023	.0019
14.65	.0136	.0065	-.0085	.0046	-.0023	.0021
16.71	.0146	.0097	-.0051	.0037	-.0022	.0026
18.76	.0195	.0104	-.0091	.0022	-.0017	.0028
20.77	-.0055	.0065	.0041	-.0036	-.0005	.0023
23.83	.0189	.0125	-.0079	.0019	-.0022	.0036
			δ = 12.0			
- 2.06	.0962	-.0009	-.0415	.0196	.0001	.0034
.04	.1003	.0028	-.0418	.0190	-.0009	-.0004
2.14	.0985	.0052	-.0403	.0187	-.0015	.0004
4.25	.1157	.0094	-.0381	.0185	-.0021	.0007
6.36	.0871	.0107	-.0374	.0175	-.0028	.0010
8.44	.0846	.0148	-.0378	.0148	-.0036	.0009
10.54	.0826	.0179	-.0311	.0127	-.0041	.0015
12.61	.0590	.0181	-.0247	.0089	-.0041	.0035
14.65	.0286	.0136	-.0212	.0075	-.0042	.0038
16.72	.0387	.0187	-.0189	.0053	-.0041	.0026
18.75	.0197	.0150	-.0143	.0031	-.0039	.0024
20.76	.0033	.0136	-.0022	-.0016	-.0024	.0022
23.82	.0274	.0217	-.0169	.0011	-.0028	.0027
			δ = 16.0			
- 2.05	.1264	.0007	-.0533	.0259	-.0003	.0061
.06	.1383	.0051	-.0528	.0249	-.0016	.0038
2.16	.1346	.0090	-.0508	.0242	-.0023	.0049
4.26	.1405	.0137	-.0478	.0234	-.0031	.0055
6.38	.1216	.0166	-.0478	.0224	-.0042	.0062
8.46	.1169	.0242	-.0461	.0194	-.0051	.0065
10.57	.1171	.0274	-.0380	.0167	-.0058	.0080
12.62	.0837	.0269	-.0283	.0117	-.0056	.0094
14.67	.0565	.0249	-.0251	.0094	-.0058	.0096
16.71	.0352	.0213	-.0195	.0070	-.0055	.0094
18.77	.0433	.0279	-.0144	.0036	-.0055	.0096
20.77	-.0065	.0181	.0066	.0075	-.0063	.0085
23.83	.0391	.0302	-.0174	.0032	-.0057	.0101
			δ = 30.6			
- 2.03	.2018	.0148	-.0887	.0405	-.0049	.0170
.07	.1996	.0220	-.0877	.0391	-.0065	.0145
2.17	.2010	.0268	-.0836	.0375	-.0077	.0153
4.28	.2140	.0330	-.0820	.0372	-.0089	.0163
6.38	.1755	.0372	-.0817	.0359	-.0107	.0177
8.48	.1836	.0496	-.0761	.0314	-.0124	.0195
10.57	.1462	.0576	-.0534	.0181	-.0143	.0227
12.61	.0938	.0489	-.0467	.0163	-.0119	.0226
14.66	.0605	.0441	-.0405	.0132	-.0118	.0212
16.71	.0535	.0458	-.0325	.0102	-.0120	.0203
18.75	.0102	.0396	-.0111	-.0021	-.0101	.0214
20.77	.0191	.0427	-.0174	.0044	-.0119	.0211
23.83	.0516	.0568	-.0314	.0052	-.0139	.0243

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.10	-.0489	.0034	.0266	-.0107	-.0006	-.0039
- .01	-.0447	.0016	.0256	-.0103	-.0002	-.0037
2.10	-.0382	.0009	.0263	-.0101	-.0000	-.0041
4.21	-.0188	.0020	.0275	-.0102	.0004	-.0037
6.32	-.0471	-.0013	.0273	-.0104	.0010	-.0032
8.41	-.0332	-.0039	.0248	-.0096	.0015	-.0032
10.51	-.0187	.0011	.0216	-.0093	.0022	-.0048
12.58	-.0231	-.0042	.0194	-.0074	.0023	-.0041
14.64	-.0320	-.0037	.0181	-.0052	.0017	-.0053
16.71	-.0215	-.0063	.0183	-.0053	.0020	-.0051
18.75	-.0060	-.0035	.0139	-.0046	.0019	-.0050
20.78	-.0041	-.0037	.0211	-.0021	.0009	-.0057
23.82	-.0091	-.0071	.0130	-.0046	.0030	-.0082
			δ = -10.5			
- 2.12	-.0937	.0076	.0428	-.0190	-.0017	.0010
- .03	-.0988	.0043	.0425	-.0192	-.0010	.0017
2.06	-.0997	.0022	.0440	-.0196	-.0006	.0009
4.18	-.0759	.0016	.0449	-.0194	.0001	.0009
6.28	-.1133	-.0044	.0448	-.0195	.0010	.0005
8.39	-.0862	-.0042	.0416	-.0186	.0022	.0004
10.49	-.0679	-.0088	.0364	-.0170	.0032	-.0009
12.56	-.0629	-.0112	.0312	-.0147	.0034	-.0016
14.63	-.0518	-.0127	.0258	-.0108	.0034	-.0022
16.70	-.0381	-.0115	.0225	-.0097	.0038	-.0029
18.73	-.0404	-.0151	.0203	-.0082	.0038	-.0038
20.77	-.0285	-.0148	.0252	-.0044	.0027	-.0059
23.81	-.0267	-.0168	.0199	-.0060	.0042	-.0070
			δ = -14.5			
- 2.14	-.1346	.0119	.0560	-.0238	-.0029	.0032
- .05	-.1374	.0068	.0552	-.0244	-.0020	.0029
2.05	-.1435	.0043	.0580	-.0249	-.0013	.0021
4.16	-.1323	.0016	.0589	-.0249	-.0005	.0026
6.26	-.1498	-.0041	.0594	-.0248	.0006	.0014
8.37	-.1410	-.0081	.0549	-.0235	.0020	.0003
10.46	-.1185	-.0114	.0502	-.0210	.0034	-.0022
12.55	-.0935	-.0161	.0401	-.0176	.0038	-.0031
14.62	-.0852	-.0202	.0332	-.0127	.0037	-.0026
16.66	-.0803	-.0229	.0299	-.0115	.0043	-.0043
18.73	-.0602	-.0211	.0258	-.0103	.0048	-.0048
20.75	-.0512	-.0237	.0307	-.0059	.0037	-.0090
23.79	-.0509	-.0267	.0262	-.0078	.0054	-.0105
			δ = -29.3			
- 2.18	-.2292	.0341	.0888	-.0393	-.0086	.0146
- .10	-.2406	.0267	.0881	-.0411	-.0075	.0138
2.01	-.2379	.0206	.0898	-.0409	-.0057	.0127
4.12	-.2330	.0160	.0944	-.0429	-.0047	.0108
6.22	-.2587	.0056	.0952	-.0441	-.0029	.0109
8.32	-.2412	-.0026	.0940	-.0443	-.0001	.0072
10.43	-.2155	-.0111	.0847	-.0403	.0026	.0030
12.51	-.1911	-.0169	.0751	-.0383	.0039	.0013
14.57	-.1743	-.0266	.0627	-.0279	.0043	-.0004
16.63	-.1574	-.0326	.0498	-.0221	.0051	-.0045
18.69	-.1222	-.0291	.0471	-.0218	.0063	-.0053
20.74	-.0972	-.0279	.0495	-.0171	.0060	-.0095
23.77	-.1057	-.0407	.0480	-.0179	.0079	-.0142



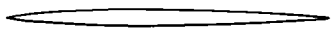
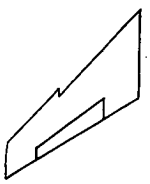


TABLE 5.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.81

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.10	.0324	.0009	-.0252	.0108	-.0000	.0027
.01	.0375	.0019	-.0273	.0113	-.0004	.0035
2.12	.0361	.0024	-.0276	.0109	-.0007	.0033
4.25	.0337	.0035	-.0258	.0108	-.0012	.0038
6.38	.0415	.0050	-.0245	.0098	-.0013	.0045
8.49	.0249	.0042	-.0186	.0075	-.0018	.0043
10.59	-.0049	.0021	-.0142	.0045	-.0019	.0041
12.67	.0061	.0048	-.0167	.0056	-.0024	.0045
14.74	.0183	.0091	-.0171	.0053	-.0027	.0053
16.77	-.0223	-.0038	-.0092	.0033	-.0021	.0048
18.79	.0026	.0050	-.0115	.0034	-.0021	.0045
20.82	.0287	.0164	-.0167	.0035	-.0027	.0045
23.90	.0052	.0077	-.0109	.0024	-.0023	.0070
			δ = 12.0			
- 2.05	.1157	.0009	-.0463	.0203	-.0006	.0060
.06	.1227	.0039	-.0483	.0201	-.0013	.0044
2.17	.1124	.0057	-.0452	.0190	-.0018	.0047
4.31	.1281	.0109	-.0445	.0187	-.0028	.0055
6.42	.1144	.0144	-.0381	.0162	-.0032	.0067
8.55	.1020	.0200	-.0257	.0123	-.0036	.0068
10.63	.0566	.0182	-.0221	.0088	-.0039	.0069
12.72	.0764	.0245	-.0248	.0099	-.0046	.0072
14.79	.0783	.0284	-.0244	.0088	-.0051	.0074
16.81	.0323	.0168	-.0151	.0062	-.0041	.0079
18.82	.0640	.0311	-.0225	.0058	-.0043	.0076
20.87	.0874	.0435	-.0253	.0052	-.0049	.0083
23.93	.0634	.0380	-.0176	.0029	-.0039	.0077
			δ = 16.0			
- 2.05	.1409	.0032	-.0621	.0263	-.0014	.0090
.07	.1463	.0070	-.0633	.0258	-.0023	.0076
2.18	.1407	.0096	-.0583	.0237	-.0030	.0082
4.30	.1400	.0143	-.0572	.0224	-.0039	.0096
6.41	.1248	.0183	-.0505	.0195	-.0046	.0106
8.53	.0907	.0205	-.0345	.0153	-.0048	.0103
10.62	.0494	.0192	-.0294	.0105	-.0051	.0094
12.72	.0728	.0261	-.0320	.0117	-.0059	.0102
14.77	.0586	.0253	-.0293	.0101	-.0061	.0108
16.81	.0275	.0181	-.0224	.0075	-.0054	.0108
18.81	.0517	.0292	-.0264	.0069	-.0057	.0108
20.85	.0703	.0388	-.0301	.0063	-.0064	.0123
23.93	.0511	.0357	-.0216	.0048	-.0073	.0143
			δ = 30.6			
- 2.03	.2199	.0198	-.0958	.0381	-.0061	.0189
.09	.2204	.0248	-.0943	.0360	-.0069	.0208
2.20	.2120	.0283	-.0940	.0351	-.0082	.0226
4.32	.2026	.0363	-.0891	.0329	-.0100	.0239
6.44	.1781	.0448	-.0745	.0252	-.0116	.0260
8.55	.1421	.0484	-.0576	.0224	-.0116	.0251
10.63	.0796	.0421	-.0490	.0160	-.0113	.0213
12.70	.0916	.0480	-.0528	.0166	-.0120	.0229
14.75	.0638	.0434	-.0454	.0125	-.0110	.0216
16.80	.0538	.0443	-.0430	.0109	-.0113	.0223
18.81	.0726	.0542	-.0429	.0104	-.0127	.0257
20.84	.0844	.0625	-.0405	.0093	-.0144	.0284
23.93	.0831	.0703	-.0323	.0059	-.0156	.0288

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.10	-.0369	.0023	.0199	-.0100	-.0004	-.0013
- .00	-.0357	.0009	.0210	-.0100	-.0003	.0006
2.12	-.0346	-.0008	.0202	-.0097	-.0000	.0012
4.24	-.0319	-.0021	.0216	-.0099	.0007	.0016
6.36	-.0243	-.0018	.0177	-.0090	.0007	.0006
8.49	-.0186	-.0021	.0175	-.0059	.0016	.0022
10.60	-.0242	-.0046	.0151	-.0044	.0012	-.0005
12.68	-.0308	-.0077	.0129	-.0053	.0017	-.0000
14.74	-.0203	-.0059	.0108	-.0050	.0018	.0002
16.81	-.0157	-.0049	.0086	-.0042	.0015	-.0003
18.78	-.0147	-.0061	.0069	-.0028	.0011	-.0000
20.83	.0129	.0041	.0027	-.0027	.0010	.0014
23.91	.0037	-.0001	.0104	-.0024	.0012	.0020
			δ = -10.5			
- 2.13	-.0655	.0053	.0258	-.0188	-.0011	.0010
- .01	-.0778	.0036	.0406	-.0198	-.0007	.0037
2.11	-.0830	.0002	.0388	-.0191	-.0003	.0044
4.23	-.0758	-.0023	.0400	-.0198	.0009	.0046
6.35	-.0681	-.0038	.0359	-.0184	.0013	.0035
8.47	-.0563	-.0055	.0325	-.0145	.0027	.0038
10.58	-.0536	-.0089	.0250	-.0107	.0024	.0015
12.69	-.0324	-.0067	.0211	-.0116	.0034	.0011
14.74	-.0448	-.0125	.0203	-.0109	.0040	.0005
16.78	-.0583	-.0184	.0186	-.0093	.0040	-.0004
18.78	-.0335	-.0133	.0148	-.0063	.0028	-.0002
20.82	-.0026	-.0022	.0087	-.0057	.0025	.0003
23.91	-.0041	-.0046	.0148	-.0055	.0029	.0019
			δ = -14.5			
- 2.14	-.0845	.0106	.0282	-.0232	-.0023	.0036
- .01	-.1120	.0075	.0594	-.0264	-.0020	.0050
2.11	-.1126	.0035	.0589	-.0256	-.0011	.0061
4.22	-.1119	-.0012	.0607	-.0260	.0005	.0056
6.35	-.1044	-.0043	.0558	-.0241	.0013	.0038
8.46	-.0929	-.0080	.0481	-.0199	.0031	.0032
10.58	-.0806	-.0118	.0388	-.0160	.0029	.0005
12.68	-.0591	-.0113	.0360	-.0161	.0042	.0004
14.73	-.0531	-.0126	.0318	-.0145	.0048	-.0009
16.77	-.0705	-.0219	.0306	-.0123	.0049	-.0026
18.79	-.0388	-.0133	.0261	-.0095	.0042	-.0026
20.83	-.0190	-.0074	.0224	-.0080	.0033	-.0028
23.93	-.0177	-.0099	.0400	-.0068	.0036	-.0007
			δ = -29.3			
- 2.16	-.4324	.0275	.0862	-.0342	-.0079	.0126
- .03	-.1749	.0264	.0861	-.0369	-.0072	.0143
2.07	-.1877	.0199	.0870	-.0378	-.0058	.0140
4.20	-.1844	.0131	.0917	-.0398	-.0038	.0137
6.32	-.1831	.0054	.0867	-.0385	-.0013	.0110
8.44	-.1547	-.0019	.0709	-.0303	.0015	.0063
10.55	-.1367	-.0103	.0577	-.0260	.0024	.0013
12.65	-.1121	-.0115	.0549	-.0268	.0040	.0009
14.73	-.0854	-.0119	.0439	-.0215	.0046	-.0020
16.78	-.0905	-.0180	.0420	-.0182	.0046	-.0044
18.78	-.0627	-.0124	.0417	-.0160	.0039	-.0042
20.81	-.0593	-.0118	.0429	-.0159	.0030	-.0040
23.89	-.0651	-.0179	.0515	-.0164	.0043	-.0040



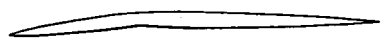
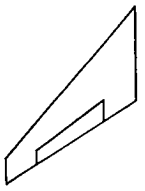


TABLE 5.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2}$ = 0.25; M = 0.81 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.10	.0488	-.0006	-.0206	.0108	.0004	.0026
.03	.0569	.0010	-.0227	.0108	-.0003	-.0003
2.16	.0620	.0028	-.0206	.0109	-.0006	.0008
4.28	.0511	.0038	-.0203	.0107	-.0010	.0009
6.40	.0462	.0050	-.0188	.0095	-.0011	.0011
8.51	.0291	.0060	-.0148	.0076	-.0018	.0004
10.59	.0338	.0079	-.0126	.0069	-.0020	.0028
12.66	.0287	.0085	-.0101	.0047	-.0020	.0023
14.73	.0164	.0063	-.0077	.0045	-.0021	.0025
16.79	.0173	.0086	-.0056	.0032	-.0019	.0030
18.84	-.0058	.0021	-.0021	.0020	-.0016	.0024
20.87	.0283	.0146	-.0099	.0034	-.0024	.0025
23.95	.0300	.0178	-.0140	.0022	-.0023	.0050
			δ = 12.0			
- 2.09	.0944	-.0003	-.0445	.0203	.0001	.0008
.04	.1043	.0034	-.0469	.0199	-.0010	-.0011
2.17	.1047	.0061	-.0443	.0191	-.0016	.0006
4.29	.0987	.0087	-.0422	.0186	-.0022	.0009
6.41	.0907	.0109	-.0435	.0173	-.0029	.0017
8.51	.0640	.0139	-.0327	.0127	-.0037	.0019
10.60	.0546	.0148	-.0258	.0103	-.0041	.0040
12.68	.0617	.0187	-.0222	.0087	-.0039	.0045
14.74	.0488	.0186	-.0189	.0074	-.0040	.0038
16.79	.0415	.0199	-.0145	.0050	-.0036	.0042
18.85	-.0035	.0112	.0038	-.0052	-.0011	.0035
20.87	.0426	.0239	-.0176	.0040	-.0036	.0025
23.92	.0158	.0164	-.0149	.0019	-.0028	.0016
			δ = 16.0			
- 2.07	.1244	.0020	-.0550	.0258	-.0003	.0056
.06	.1356	.0065	-.0586	.0243	-.0019	.0038
2.18	.1250	.0098	-.0513	.0232	-.0025	.0054
4.30	.1298	.0140	-.0555	.0232	-.0035	.0060
6.44	.1329	.0184	-.0572	.0224	-.0045	.0076
8.52	.0916	.0215	-.0417	.0163	-.0054	.0072
10.61	.0769	.0234	-.0313	.0118	-.0057	.0091
12.69	.0777	.0261	-.0282	.0111	-.0055	.0100
14.75	.0599	.0251	-.0233	.0090	-.0054	.0094
16.81	.0486	.0282	-.0172	.0062	-.0050	.0097
18.84	-.0202	.0168	.0163	.0068	-.0055	.0117
20.86	.0331	.0259	-.0173	.0049	-.0050	.0071
23.94	.0300	.0296	-.0189	.0030	-.0057	.0100
			δ = 30.6			
- 2.05	.1874	.0158	-.0885	.0386	-.0047	.0176
.07	.1950	.0222	-.0884	.0368	-.0065	.0151
2.19	.1883	.0272	-.0853	.0357	-.0075	.0160
4.31	.1769	.0312	-.0811	.0345	-.0087	.0172
6.44	.1750	.0373	-.0847	.0335	-.0107	.0199
8.54	.1504	.0515	-.0735	.0259	-.0136	.0227
10.63	.1095	.0523	-.0473	.0159	-.0137	.0232
12.67	.0795	.0434	-.0427	.0172	-.0117	.0236
14.71	.0452	.0382	-.0342	.0126	-.0112	.0210
16.81	.0530	.0454	-.0194	.0079	-.0112	.0198
18.87	.0460	.0511	-.0143	.0017	-.0098	.0215
20.87	.0683	.0569	-.0395	.0092	-.0127	.0226
23.93	.0397	.0524	-.0311	.0054	-.0140	.0258

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.12	-.0566	.0039	.0283	-.0100	-.0005	-.0041
- .01	-.0451	.0017	.0247	-.0099	-.0003	-.0038
2.10	-.0773	.0009	.0311	-.0102	.0001	-.0042
4.25	-.0466	-.0003	.0275	-.0102	.0004	-.0034
6.37	-.0454	-.0021	.0316	-.0101	.0008	-.0031
8.49	-.0402	-.0042	.0261	-.0090	.0014	-.0039
10.59	-.0213	-.0020	.0214	-.0082	.0019	-.0039
12.66	-.0093	-.0019	.0192	-.0059	.0019	-.0054
14.73	-.0179	-.0052	.0199	-.0058	.0021	-.0054
16.78	-.0117	-.0033	.0149	-.0051	.0022	-.0052
18.86	-.0126	-.0058	.0190	-.0041	.0014	-.0047
20.85	.0126	.0016	.0028	-.0035	.0009	-.0060
23.94	-.0021	-.0033	.0131	-.0035	.0023	-.0072
			δ = -10.5			
- 2.14	-.1047	.0068	.0464	-.0189	-.0018	.0016
- .03	-.0931	.0026	.0431	-.0192	-.0011	.0017
2.10	-.1013	.0005	.0486	-.0198	-.0006	.0006
4.21	-.1100	-.0030	.0468	-.0198	.0001	.0009
6.35	-.1010	-.0069	.0454	-.0194	.0011	.0004
8.46	-.1068	-.0112	.0568	-.0179	.0019	-.0011
10.64	-.0026	.0017	.0469	-.0159	.0030	-.0014
12.63	-.0524	-.0107	.0309	-.0119	.0031	-.0031
14.71	-.0560	-.0141	.0301	-.0108	.0036	-.0029
16.77	-.0459	-.0132	.0294	-.0098	.0039	-.0039
18.83	-.0472	-.0172	.0270	-.0083	.0036	-.0048
20.86	.0077	-.0077	.0079	-.0079	.0033	-.0072
23.91	-.0376	-.0202	.0196	-.0068	.0044	-.0060
			δ = -14.5			
- 2.16	-.1370	.0123	.0588	-.0233	-.0030	.0033
- .05	-.1327	.0076	.0574	-.0239	-.0022	.0033
2.08	-.1500	.0045	.0631	-.0246	-.0014	.0027
4.20	-.1436	.0012	.0631	-.0250	-.0005	.0024
6.32	-.1486	-.0047	.0617	-.0248	.0007	.0006
8.45	-.1446	-.0110	.0611	-.0227	.0017	-.0013
10.55	-.1055	-.0141	.0528	-.0207	.0032	-.0040
12.62	-.0865	-.0161	.0404	-.0150	.0034	-.0032
14.69	-.0804	-.0184	.0357	-.0135	.0039	-.0037
16.75	-.0757	-.0206	.0357	-.0117	.0042	-.0042
18.80	-.0886	-.0300	.0364	-.0105	.0045	-.0055
20.85	-.0182	-.0165	.0157	-.0101	.0043	-.0094
23.89	-.0694	-.0338	.0329	-.0082	.0054	-.0103
			δ = -29.3			
- .07	-.2094	.0259	.0865	-.0377	-.0075	.0133
2.04	-.2372	.0204	.0926	-.0386	-.0059	.0122
4.15	-.2457	.0144	.0944	-.0404	-.0048	.0117
6.29	-.2467	.0052	.0939	-.0415	-.0027	.0090
8.39	-.2402	-.0065	.0936	-.0392	-.0004	.0049
10.52	-.1845	-.0119	.0786	-.0349	.0025	.0009
12.60	-.1449	-.0131	.0639	-.0273	.0031	-.0009
14.66	-.1318	-.0201	.0511	-.0215	.0037	-.0022
16.74	-.1160	-.0219	.0501	-.0193	.0042	-.0037
18.79	-.1288	-.0327	.0528	-.0190	.0049	-.0058
20.82	-.0877	-.0268	.0444	-.0117	.0031	-.0100
23.90	-.1025	-.0343	.0547	-.0189	.0067	-.0098



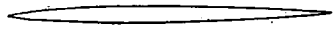
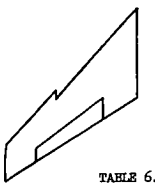


TABLE 6.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.25$; M = 0.85

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.10	.0421	-.0005	-.0265	.0109	.0002	.0029
.01	.0425	.0009	-.0294	.0112	-.0001	.0019
2.14	.0358	.0021	-.0279	.0110	-.0005	.0020
4.27	.0367	.0031	-.0248	.0105	-.0008	.0026
6.41	.0371	.0037	-.0242	.0100	-.0008	.0028
8.53	.0272	.0056	-.0254	.0074	-.0019	.0044
10.65	.0189	.0055	-.0188	.0062	-.0022	.0041
12.70	.0116	.0058	-.0157	.0058	-.0023	.0048
14.77	.0091	.0053	-.0141	.0051	-.0025	.0049
16.83	.0056	.0057	-.0130	.0033	-.0020	.0047
18.86	.0385	.0175	-.0184	.0030	-.0018	.0001
			δ = 12.0			
- 2.05	.1211	-.0000	-.0483	.0202	-.0005	.0051
.06	.1291	.0033	-.0511	.0199	-.0012	.0038
2.19	.1225	.0066	-.0482	.0190	-.0018	.0046
4.31	.1056	.0094	-.0461	.0186	-.0023	.0078
6.44	.1030	.0133	-.0415	.0161	-.0029	.0062
8.57	.0728	.0152	-.0308	.0122	-.0038	.0068
10.66	.0429	.0138	-.0217	.0085	-.0037	.0068
12.73	.0572	.0197	-.0263	.0095	-.0044	.0067
14.80	.0428	.0176	-.0227	.0083	-.0046	.0080
16.85	.0349	.0176	-.0172	.0061	-.0040	.0081
18.87	.0612	.0295	-.0236	.0051	-.0036	.0077
			δ = 16.0			
- 2.06	.1444	.0028	-.0614	.0249	-.0010	.0068
.07	.1531	.0070	-.0642	.0251	-.0023	.0068
2.19	.1387	.0105	-.0599	.0228	-.0028	.0074
4.32	.1351	.0147	-.0594	.0217	-.0036	.0084
6.45	.1225	.0187	-.0520	.0188	-.0043	.0099
8.59	.0939	.0216	-.0371	.0147	-.0053	.0109
10.68	.0590	.0202	-.0274	.0104	-.0047	.0106
12.73	.0662	.0244	-.0326	.0115	-.0058	.0099
14.80	.0532	.0229	-.0289	.0100	-.0060	.0112
16.85	.0503	.0259	-.0249	.0074	-.0052	.0118
18.88	.0766	.0381	-.0302	.0057	-.0049	.0109
			δ = 30.6			
- 2.03	.2259	.0184	-.0947	.0369	-.0058	.0169
.08	.2166	.0241	-.0948	.0347	-.0067	.0177
2.21	.2052	.0281	-.0914	.0337	-.0076	.0186
4.34	.1945	.0358	-.0851	.0310	-.0096	.0209
6.46	.1869	.0491	-.0796	.0233	-.0120	.0257
8.59	.1450	.0507	-.0637	.0211	-.0122	.0247
10.66	.0892	.0439	-.0461	.0160	-.0112	.0200
12.73	.0918	.0472	-.0503	.0162	-.0119	.0219
14.79	.0830	.0497	-.0484	.0129	-.0114	.0222
16.85	.0676	.0492	-.0432	.0102	-.0110	.0221
18.86	.0849	.0590	-.0425	.0088	-.0118	.0248

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.10	-.0294	.0009	.0235	-.0108	-.0002	-.0020
.01	-.0387	-.0003	.0233	-.0110	.0001	-.0008
2.14	-.0357	-.0012	.0232	-.0104	.0004	-.0004
4.27	-.0415	-.0034	.0242	-.0102	.0008	-.0005
6.40	-.0250	-.0025	.0191	-.0083	.0009	-.0006
8.54	-.0296	-.0047	.0206	-.0072	.0016	.0007
10.64	-.0320	-.0068	.0183	-.0053	.0014	-.0008
12.71	-.0237	-.0067	.0147	-.0052	.0018	-.0002
14.79	-.0154	-.0035	.0123	-.0048	.0019	-.0001
16.83	-.0275	-.0099	.0134	-.0040	.0017	-.0006
18.83	-.0050	-.0036	.0079	-.0027	.0010	-.0003
			δ = -10.5			
- 2.15	-.0629	.0055	.0176	-.0191	-.0012	.0024
- .00	-.0812	.0030	.0454	-.0211	-.0007	.0027
2.13	-.0751	.0005	.0446	-.0202	-.0001	.0033
4.26	-.0797	-.0030	.0457	-.0202	.0009	.0031
6.39	-.0633	-.0038	.0367	-.0177	.0013	.0021
8.52	-.0724	-.0090	.0367	-.0148	.0026	.0027
10.64	-.0479	-.0083	.0308	-.0118	.0026	.0004
12.69	-.0468	-.0110	.0257	-.0108	.0032	.0002
14.77	-.0447	-.0133	.0253	-.0099	.0035	-.0001
16.82	-.0435	-.0140	.0214	-.0091	.0038	-.0007
18.85	.0003	-.0012	.0130	-.0074	.0034	-.0000
			δ = -14.5			
- 2.15	-.0764	.0110	.0230	-.0234	-.0024	.0035
- .00	-.1015	.0076	.0592	-.0262	-.0020	.0049
2.12	-.1056	.0038	.0624	-.0250	-.0011	.0061
4.25	-.1149	-.0011	.0661	-.0266	.0004	.0043
6.39	-.1000	-.0042	.0597	-.0245	.0015	.0036
8.51	-.1089	-.0113	.0562	-.0211	.0030	.0024
10.64	-.0739	-.0104	.0471	-.0181	.0032	-.0009
12.70	-.0607	-.0115	.0401	-.0158	.0038	-.0009
14.77	-.0688	-.0175	.0396	-.0140	.0044	-.0014
16.82	-.0683	-.0198	.0362	-.0125	.0047	-.0024
18.85	-.0341	-.0113	.0314	-.0108	.0045	-.0039
			δ = -29.3			
- 2.16	-.1388	.0263	.0595	-.0340	-.0078	.0127
- .03	-.1665	.0258	.0887	-.0367	-.0071	.0135
2.10	-.1825	.0199	.0913	-.0373	-.0057	.0138
4.22	-.1941	.0121	.0963	-.0396	-.0038	.0118
6.35	-.1819	.0057	.0896	-.0377	-.0017	.0101
8.48	-.1696	-.0060	.0749	-.0294	.0013	.0047
10.60	-.1450	-.0126	.0660	-.0248	.0023	.0002
12.68	-.0996	-.0106	.0541	-.0226	.0033	-.0001
14.76	-.0902	-.0152	.0462	-.0186	.0041	-.0018
16.81	-.0949	-.0211	.0447	-.0162	.0041	-.0046
18.83	-.0649	-.0138	.0428	-.0153	.0037	-.0050



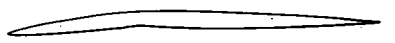
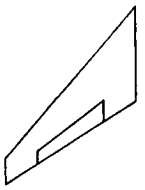


TABLE 6.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.85 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.11	.0549	-.0009	-.0231	.0113	.0004	.0031
.03	.0660	.0009	-.0244	.0111	-.0003	.0003
2.16	.0604	.0025	-.0248	.0110	-.0006	.0008
4.31	.0532	.0037	-.0288	.0108	-.0012	.0008
6.44	.0669	.0060	-.0321	.0101	-.0016	.0014
8.53	.0321	.0059	-.0126	.0068	-.0020	.0014
10.63	.0375	.0096	-.0140	.0056	-.0021	.0026
12.71	.0365	.0082	-.0096	.0052	-.0021	.0030
14.77	.0339	.0120	-.0133	.0043	-.0022	.0028
16.82	.0179	.0087	-.0073	.0032	-.0018	.0028
18.89	.0186	.0102	-.0066	.0028	-.0016	.0025
			δ = 12.0			
- 2.09	.0982	.0002	-.0468	.0205	-.0000	.0030
.04	.1122	.0036	-.0467	.0192	-.0010	.0002
2.17	.0931	.0065	-.0462	.0189	-.0017	.0012
4.35	.1077	.0102	-.0352	.0179	-.0026	.0013
6.45	.1104	.0222	-.0552	.0169	-.0033	.0238
8.54	.0729	.0503	-.0319	.0124	-.0045	.0030
10.63	.0502	.0499	-.0226	.0091	-.0039	.0045
12.70	.0518	.0505	-.0252	.0090	-.0043	.0044
14.78	.0482	.0528	-.0215	.0072	-.0040	.0052
16.83	.0208	.0463	-.0146	.0048	-.0037	.0041
18.87	-.0117	.0297	-.0085	.0045	-.0033	.0029
			δ = 16.0			
- 2.08	.1279	.0025	-.0575	.0250	-.0005	.0058
.06	.1434	.0074	-.0580	.0233	-.0020	.0052
2.19	.1286	.0112	-.0561	.0228	-.0027	.0057
4.31	.1162	.0138	-.0627	.0218	-.0036	.0067
6.45	.1308	.0218	-.0673	.0208	-.0047	.0080
8.56	.1168	.0292	-.0476	.0174	-.0065	.0100
10.63	.0703	.0259	-.0333	.0104	-.0053	.0102
12.71	.0681	.0246	-.0277	.0115	-.0059	.0100
14.78	.0603	.0284	-.0248	.0087	-.0054	.0111
16.79	-.0238	.0116	-.0086	-.0039	-.0034	.0099
18.91	.0582	.0341	-.0237	.0050	-.0045	.0101
			δ = 30.6			
- 2.07	.1861	.0154	-.0902	.0379	-.0046	.0185
.06	.1934	.0226	-.0887	.0353	-.0065	.0159
2.20	.1734	.0271	-.0849	.0339	-.0074	.0157
4.31	.1384	.0288	-.0839	.0322	-.0052	.0185
6.44	.1643	.0395	-.0933	.0297	-.0107	.0199
8.55	.1407	.0508	-.0697	.0237	-.0133	.0223
10.65	.0968	.0494	-.0430	.0152	-.0135	.0233
12.72	.0784	.0476	-.0329	.0092	-.0125	.0244
14.77	.0630	.0486	-.0360	.0051	-.0113	.0230
16.85	.0415	.0478	-.0193	.0004	-.0095	.0228
18.90	.0722	.0558	-.0408	.0087	-.0112	.0215

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.13	-.0566	.0025	.0286	-.0102	-.0006	-.0032
- .01	-.0454	-.0000	.0280	-.0104	-.0003	-.0029
2.13	-.0564	-.0018	.0292	-.0102	.0001	-.0035
4.28	-.0529	-.0037	.0246	-.0111	.0003	-.0038
6.41	-.0432	-.0039	.0241	-.0108	.0009	-.0041
8.51	-.0361	-.0048	.0286	-.0085	.0015	-.0043
10.62	-.0123	-.0014	.0171	-.0073	.0017	-.0052
12.70	-.0113	-.0031	.0208	-.0061	.0019	-.0046
14.77	-.0024	-.0013	.0143	-.0053	.0021	-.0053
16.82	-.0250	-.0072	.0169	-.0048	.0021	-.0062
18.89	.0020	-.0042	.0057	-.0023	.0052	-.0034
			δ = -10.5			
- 2.17	-.1120	.0087	.0489	-.0192	-.0019	.0019
- .03	-.1062	.0048	.0464	-.0196	-.0013	.0003
2.11	-.1162	.0016	.0489	-.0197	-.0006	-.0005
4.24	-.1235	-.0021	.0457	-.0202	-.0001	-.0014
6.36	-.1155	-.0053	.0476	-.0193	.0009	-.0027
8.49	-.0954	-.0125	.0479	-.0193	.0019	-.0045
10.57	-.0964	-.0160	.0412	-.0135	.0023	-.0057
12.66	-.0656	-.0143	.0309	-.0109	.0028	-.0059
14.73	-.0587	-.0152	.0276	-.0101	.0032	-.0056
16.79	-.0661	-.0193	.0256	-.0086	.0035	-.0067
18.86	-.0294	-.0157	.0113	.0019	.0013	-.0076
			δ = -14.5			
- 2.16	-.1320	.0131	.0641	-.0235	-.0032	.0043
- .04	-.1308	.0084	.0611	-.0237	-.0025	.0043
2.09	-.1486	.0049	.0654	-.0247	-.0016	.0031
4.23	-.1593	-.0002	.0636	-.0264	-.0008	.0022
6.37	-.1455	-.0046	.0648	-.0261	.0005	.0003
8.48	-.1256	-.0100	.0658	-.0231	.0020	-.0030
10.57	-.1118	-.0162	.0540	-.0193	.0028	-.0041
12.66	-.0732	-.0129	.0448	-.0158	.0030	-.0047
14.71	-.0853	-.0194	.0390	-.0137	.0036	-.0044
16.79	-.0882	-.0234	.0400	-.0128	.0043	-.0057
18.84	-.0401	-.0228	.0106	-.0115	.0051	-.0073
			δ = -29.3			
- .06	-.2029	.0266	.0909	-.0370	-.0077	.0145
2.05	-.2336	.0207	.0942	-.0378	-.0061	.0127
4.20	-.2446	.0135	.0959	-.0405	-.0051	.0115
6.32	-.2437	.0050	.0993	-.0412	-.0029	.0079
8.44	-.2097	-.0054	.0937	-.0382	-.0002	.0030
10.55	-.1731	-.0117	.0769	-.0314	.0023	-.0012
12.63	-.1439	-.0169	.0668	-.0256	.0029	-.0010
14.70	-.1235	-.0191	.0513	-.0200	.0034	-.0027
16.77	-.1258	-.0266	.0497	-.0177	.0040	-.0051
18.85	-.0567	-.0176	.0220	-.0180	.0050	-.0070



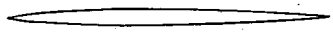
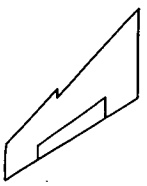


TABLE 7.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.90

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.11	.0455	.0004	-.0290	.0114	-.0000	.0025
.01	.0474	.0024	-.0310	.0119	-.0004	.0034
2.14	.0476	.0037	-.0317	.0112	-.0008	.0034
4.29	.0370	.0052	-.0292	.0101	-.0015	.0035
6.41	.0273	.0076	-.0258	.0068	-.0020	.0043
8.55	.0368	.0102	-.0251	.0086	-.0015	.0048
10.65	.0171	.0047	-.0152	.0053	-.0019	.0042
12.71	.0361	.0121	-.0250	.0055	-.0020	.0036
14.80	.0189	.0087	-.0196	.0051	-.0021	.0053
			δ = 12.0			
- 2.09	.1171	.0019	-.0505	.0200	-.0007	.0053
.05	.1220	.0061	-.0534	.0201	-.0017	.0059
2.19	.1150	.0094	-.0505	.0172	-.0023	.0065
4.32	.0975	.0130	-.0478	.0153	-.0034	.0075
6.44	.0784	.0184	-.0370	.0110	-.0043	.0075
8.57	.0799	.0230	-.0398	.0131	-.0035	.0078
10.68	.0476	.0144	-.0183	.0114	-.0040	.0068
12.75	.0862	.0271	-.0344	.0090	-.0044	.0071
14.81	.0460	.0189	-.0241	.0082	-.0046	.0082
			δ = 16.0			
- 2.07	.1502	.0048	-.0645	.0239	-.0016	.0085
.06	.1483	.0100	-.0671	.0235	-.0028	.0092
2.18	.1369	.0134	-.0656	.0204	-.0033	.0096
4.32	.1172	.0174	-.0576	.0185	-.0045	.0108
6.45	.0939	.0234	-.0446	.0135	-.0054	.0111
8.58	.1025	.0301	-.0494	.0160	-.0051	.0112
10.59	-.0106	.0080	-.0358	.0148	-.0058	.0106
12.74	.0881	.0300	-.0375	.0106	-.0056	.0109
			δ = 30.6			
- 2.05	.2195	.0199	-.0985	.0359	-.0060	.0174
.16	.2778	.0263	-.0904	.0332	-.0070	.0195
2.20	.1938	.0295	-.0914	.0306	-.0079	.0193
4.33	.1679	.0359	-.0824	.0267	-.0097	.0215
6.46	.1415	.0502	-.0664	.0199	-.0121	.0248
8.60	.1409	.0569	-.0685	.0224	-.0120	.0247
10.69	.1172	.0530	-.0531	.0226	-.0126	.0230
12.75	.1320	.0583	-.0629	.0155	-.0125	.0235
14.81	.0901	.0525	-.0500	.0113	-.0116	.0242

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.12	-.0293	.0027	.0222	-.0114	-.0003	-.0022
.02	-.0360	.0014	.0289	-.0114	-.0001	.0007
2.17	-.0221	-.0010	.0249	-.0112	.0002	.0010
4.30	-.0230	-.0014	.0267	-.0109	.0005	.0001
6.43	-.0233	-.0016	.0228	-.0090	.0012	-.0013
8.55	.0012	.0041	.0110	-.0058	.0019	-.0014
10.66	-.0092	-.0001	.0199	-.0026	.0014	-.0015
12.73	.0014	.0003	.0126	-.0054	.0018	-.0011
14.83	.0126	.0025	.0052	-.0041	.0019	-.0009
			δ = -10.5			
- 2.15	-.0448	.0074	.0153	-.0183	-.0015	.0024
- .00	-.0782	.0053	.0495	-.0204	-.0012	.0053
2.14	-.0685	.0015	.0480	-.0198	-.0004	.0056
4.29	-.0727	-.0014	.0498	-.0206	.0004	.0041
6.41	-.0684	-.0040	.0461	-.0180	.0012	.0030
8.55	-.0373	-.0009	.0278	-.0134	.0028	-.0000
10.67	-.0379	-.0053	.0338	-.0107	.0025	-.0003
12.74	-.0134	-.0018	.0244	-.0116	.0031	-.0003
14.81	-.0291	-.0074	.0249	-.0105	.0035	-.0006
			δ = -14.5			
- 2.15	-.0574	.0132	.0182	-.0221	-.0029	.0045
- .00	-.0916	.0102	.0608	-.0247	-.0024	.0079
2.15	-.0999	.0057	.0662	-.0246	-.0014	.0070
4.29	-.0927	.0018	.0690	-.0258	-.0003	.0054
6.43	-.0925	-.0026	.0652	-.0235	.0007	.0028
8.55	-.0746	-.0043	.0538	-.0191	.0027	.0015
10.66	-.0733	-.0101	.0592	-.0147	.0026	-.0005
12.73	-.0439	-.0051	.0438	-.0166	.0033	-.0013
14.81	-.0417	-.0073	.0411	-.0150	.0040	-.0028
			δ = -29.3			
- .00	-.1537	.0274	.0923	-.0344	-.0073	.0159
2.11	-.1706	.0209	.0959	-.0370	-.0059	.0149
4.26	-.1893	.0124	.1075	-.0389	-.0042	.0127
6.40	-.1798	.0071	.1052	-.0388	-.0031	.0105
8.52	-.1384	-.0022	.0755	-.0284	.0012	.0047
10.65	-.0872	.0002	.0594	-.0206	.0013	.0009
12.71	-.0729	-.0022	.0551	-.0213	.0020	-.0008
14.81	-.0905	-.0137	.0647	-.0182	.0036	-.0029



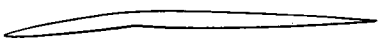
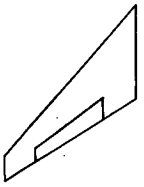


TABLE 7.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.90 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7							δ = -5.1			
- 2.12	.0557	-.0011	-.0261	.0106	.0002	.0025	- 2.15	-.0546	.0020	.0324	-.0111	-.0007	-.0029
.03	.0677	.0012	-.0274	.0113	-.0003	-.0000	- .00	-.0540	.0004	.0297	-.0108	-.0003	-.0033
2.17	.0467	.0092	-.0287	.0106	-.0008	.0006	2.15	-.0667	-.0027	.0356	-.0107	.0001	-.0035
4.30	.0460	.0056	-.0268	.0094	-.0015	.0012	4.30	-.0462	-.0037	.0346	-.0117	.0005	-.0035
6.44	.0452	.0070	-.0211	.0086	-.0016	.0025	6.42	-.0470	-.0055	.0335	-.0110	.0014	-.0045
8.54	.0315	.0089	-.0161	.0076	-.0021	.0028	8.53	-.0589	-.0106	.0366	-.0067	.0015	-.0045
10.63	.0245	.0068	-.0102	.0049	-.0019	.0034	10.63	-.0171	-.0005	.0143	-.0054	.0015	-.0052
12.74	.0508	.0178	-.0110	-.0018	-.0023	.0040	12.70	-.0115	-.0017	.0097	-.0062	.0018	-.0047
14.84	.0450	.0145	-.0119	.0060	-.0025	.0030	14.83	-.0020	-.0033	.0120	.0035	.0014	-.0067
			δ = 12.0							δ = -10.5			
- 2.11	.0994	.0008	-.0488	.0196	-.0002	.0040	- 2.16	-.1035	.0094	.0558	-.0179	-.0021	.0009
.04	.1042	.0049	-.0491	.0183	-.0014	.0012	- .02	-.1061	.0059	.0524	-.0183	-.0016	-.0010
2.18	.0847	.0081	-.0463	.0171	-.0020	.0016	2.12	-.1263	.0016	.0594	-.0195	-.0008	-.0027
4.30	.0735	.0112	-.0440	.0146	-.0029	.0027	4.26	-.1255	-.0030	.0626	-.0209	.0001	-.0042
6.42	.0664	.0141	-.0434	.0136	-.0033	.0038	6.40	-.1031	-.0047	.0564	-.0202	.0017	-.0065
8.55	.0574	.0178	-.0249	.0095	-.0041	.0044	8.50	-.0963	-.0120	.0484	-.0146	.0026	-.0085
10.65	.0607	.0230	-.0258	.0081	-.0046	.0056	10.60	-.0712	-.0114	.0306	-.0106	.0024	-.0084
12.74	.0533	.0238	-.0110	.0075	-.0056	.0019	12.68	-.0472	-.0083	.0248	-.0120	.0029	-.0086
14.83	.0457	.0198	-.0184	.0091	-.0050	.0039	14.79	-.0543	-.0159	.0262	-.0012	.0023	-.0106
			δ = 16.0							δ = -14.5			
- 2.10	.1246	.0038	-.0593	.0235	-.0009	.0081	- 2.18	-.1369	.0142	.0653	-.0224	-.0035	.0047
.05	.1264	.0089	-.0606	.0222	-.0024	.0059	- .02	-.1308	.0098	.0645	-.0229	-.0028	.0046
2.18	.0997	.0123	-.0550	.0201	-.0030	.0065	2.10	-.1611	.0048	.0726	-.0243	-.0019	.0033
4.31	.0913	.0162	-.0513	.0171	-.0040	.0070	4.26	-.1559	-.0018	.0794	-.0263	-.0008	.0015
6.43	.0878	.0217	-.0534	.0152	-.0046	.0083	6.40	-.1455	-.0079	.0824	-.0262	.0010	-.0012
8.56	.0681	.0230	-.0297	.0131	-.0054	.0094	8.51	-.1327	-.0150	.0724	-.0225	.0028	-.0044
10.67	.0735	.0241	-.0292	.0100	-.0062	.0100	10.61	-.0885	-.0096	.0452	-.0158	.0026	-.0054
12.74	.0815	.0337	-.0322	.0044	-.0059	.0114	12.68	-.0751	-.0096	.0421	-.0175	.0029	-.0043
14.84	.0657	.0275	-.0253	.0066	-.0057	.0096	14.77	-.0794	-.0206	.0345	-.0150	.0038	-.0063
			δ = 30.6							δ = -29.3			
- 2.10	.1763	.0161	-.0911	.0354	-.0047	.0173	- .05	-.1986	.0262	.0911	-.0348	-.0075	.0139
.05	.1734	.0235	-.0905	.0331	-.0067	.0158	2.08	-.2352	.0208	.1029	-.0373	-.0063	.0122
2.17	.1269	.0266	-.0786	.0310	-.0076	.0157	4.23	-.2297	.0130	.1105	-.0411	-.0050	.0106
4.31	.1289	.0318	-.0765	.0272	-.0089	.0179	6.36	-.2318	.0017	.1146	-.0416	-.0020	.0057
6.43	.1059	.0338	-.0673	.0221	-.0100	.0201	8.47	-.2044	-.0093	.0998	-.0358	.0010	.0005
8.55	.1001	.0481	-.0624	.0161	-.0120	.0220	10.59	-.1398	-.0082	.0657	-.0247	.0026	-.0036
10.66	.0919	.0509	-.0451	.0152	-.0130	.0236	12.66	-.1034	-.0072	.0523	-.0203	.0023	-.0032
12.76	.1101	.0582	-.0366	.0164	-.0132	.0252	14.75	-.1065	-.0201	.0386	-.0182	.0029	-.0053



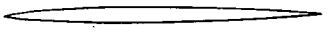
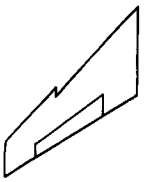


TABLE 8.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.94

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y	α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7							δ = -5.1			
- 2.12	.0476	-.0001	-.0312	.0116	-.0001	.0042	- 2.13	-.0216	.0029	.0127	-.0102	-.0009	-.0004
- .00	.0544	.0022	-.0363	.0116	-.0006	.0033	.03	-.0209	.0012	.0278	-.0115	-.0004	.0009
2.13	.0390	.0045	-.0311	.0095	-.0011	.0040	2.16	-.0206	.0002	.0253	-.0109	.0001	.0012
4.26	.0222	.0043	-.0242	.0074	-.0016	.0042	4.30	-.0148	-.0036	.0298	-.0110	.0008	-.0000
6.39	.0157	.0058	-.0208	.0057	-.0019	.0041	6.42	-.0191	-.0023	.0223	-.0075	.0012	-.0020
8.52	.0139	.0050	-.0158	.0061	-.0020	.0044	8.53	-.0192	-.0040	.0189	-.0057	.0012	-.0019
10.63	.0101	.0048	-.0221	.0075	-.0026	.0052	10.66	-.0347	-.0068	.0237	-.0070	.0018	-.0018
			δ = 12.0							δ = -10.5			
- 2.09	.1122	.0017	-.0569	.0197	-.0014	.0070	- 2.15	-.0387	.0085	.0078	-.0167	-.0023	.0053
.05	.1233	.0061	-.0566	.0185	-.0022	.0061	.02	-.0610	.0059	.0467	-.0192	-.0017	.0057
2.16	.0944	.0105	-.0475	.0149	-.0028	.0068	2.15	-.0543	.0031	.0452	-.0191	-.0008	.0056
4.29	.0780	.0118	-.0390	.0127	-.0036	.0072	4.29	-.0518	-.0014	.0461	-.0189	.0006	.0029
6.44	.0655	.0146	-.0242	.0096	-.0042	.0072	6.41	-.0519	-.0040	.0414	-.0159	.0016	.0012
8.55	.0593	.0159	-.0248	.0110	-.0046	.0077	8.54	-.0539	-.0069	.0456	-.0122	.0019	-.0005
10.66	.0715	.0208	-.0433	.0117	-.0054	.0096	10.65	-.0618	-.0089	.0474	-.0147	.0028	-.0006
			δ = 16.0							δ = -14.5			
- 2.09	.1373	.0053	-.0714	.0234	-.0023	.0100	- 2.14	-.0508	.0146	.0202	-.0201	-.0041	.0079
.04	.1487	.0106	-.0705	.0218	-.0034	.0092	.02	-.0773	.0113	.0640	-.0235	-.0031	.0088
2.18	.1223	.0140	-.0606	.0181	-.0038	.0097	2.15	-.0963	.0048	.0660	-.0243	-.0018	.0067
4.30	.0994	.0171	-.0502	.0154	-.0049	.0106	4.28	-.0775	.0003	.0656	-.0241	-.0002	.0036
6.43	.0864	.0222	-.0412	.0123	-.0055	.0109	6.43	-.0693	-.0030	.0611	-.0211	.0011	.0008
8.56	.0975	.0262	-.0466	.0137	-.0064	.0120	8.55	-.0687	-.0062	.0608	-.0165	.0018	-.0003
10.64	.1110	.0330	-.0820	.0142	-.0075	.0138	10.67	-.0743	-.0060	.0658	-.0225	.0027	-.0017
			δ = 30.6							δ = -29.3			
- 2.07	.2142	.0201	-.1062	.0348	-.0066	.0190	- 2.14	-.1116	.0304	.0613	-.0297	-.0091	.0160
.06	.2087	.0277	-.1030	.0312	-.0079	.0205	.01	-.1364	.0301	.0950	-.0346	-.0087	.0166
2.18	.1772	.0334	-.0933	.0292	-.0089	.0215	2.14	-.1579	.0191	.1027	-.0362	-.0063	.0151
4.31	.1484	.0357	-.0754	.0243	-.0101	.0220	4.28	-.1540	.0111	.1073	-.0399	-.0040	.0105
6.75	.4016	.0808	-.0443	.0213	-.0123	.0254	6.42	-.1453	.0055	.0999	-.0369	-.0023	.0068
8.54	.1471	.0567	-.0901	.0188	-.0147	.0290	8.54	-.1257	-.0024	.0912	-.0292	.0001	.0017
10.66	.1560	.0671	-.1034	.0177	-.0166	.0320	10.66	-.1087	-.0024	.0777	-.0237	.0016	-.0027



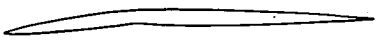
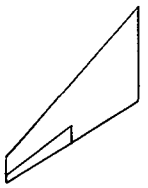


TABLE 8.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.25; M = 0.94 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 6.7			
- 2.12	.0558	-.0011	-.0304	.0114	.0003	.0026
.02	.0621	.0021	-.0290	.0109	-.0005	.0002
2.15	.0423	.0053	-.0252	.0084	-.0012	.0013
4.28	.0358	.0071	-.0394	.0067	-.0015	.0017
6.41	.0371	.0048	-.0151	.0070	-.0016	.0037
8.54	.0258	.0041	-.0045	.0051	-.0018	.0030
10.61	.0300	.0081	-.0267	.0068	-.0026	.0035
			δ = 12.0			
- 2.12	.0908	.0014	-.0528	.0185	-.0006	.0029
.03	.1037	.0058	-.0501	.0170	-.0016	.0013
2.16	.0773	.0077	-.0415	.0144	-.0024	.0022
4.29	.0641	.0119	-.0538	.0121	-.0030	.0034
6.41	.0651	.0105	-.0290	.0121	-.0033	.0045
8.51	.0532	.0168	-.0327	.0096	-.0040	.0047
10.62	.0810	.0292	-.0620	.0098	-.0049	.0059
			δ = 16.0			
- 2.12	.1124	.0050	-.0644	.0223	-.0015	.0052
.03	.1208	.0107	-.0637	.0200	-.0028	.0067
2.16	.0983	.0132	-.0543	.0176	-.0036	.0072
4.29	.0771	.0150	-.0602	.0150	-.0039	.0077
6.39	.0755	.0222	-.0450	.0138	-.0050	.0102
8.52	.0616	.0202	-.0322	.0132	-.0054	.0105
10.62	.1085	.0340	-.0804	.0116	-.0069	.0122
			δ = 30.6			
- 2.12	.1672	.0169	-.0975	.0341	-.0050	.0173
.02	.1677	.0253	-.0949	.0321	-.0072	.0174
2.16	.1433	.0287	-.0840	.0290	-.0083	.0184
4.29	.1139	.0326	-.0832	.0254	-.0093	.0194
6.39	.1095	.0407	-.0698	.0251	-.0113	.0237
8.54	.0759	.0375	-.0355	.0146	-.0115	.0223
10.64	.1331	.0576	-.0830	.0168	-.0149	.0282

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -5.1			
- 2.13	-.0468	.0020	.0325	-.0105	-.0008	-.0028
- .00	-.0407	.0014	.0301	-.0104	-.0004	-.0028
2.15	-.0460	-.0036	.0374	-.0108	-.0000	-.0033
4.28	-.0471	-.0052	.0178	-.0110	.0010	-.0038
6.41	-.0377	-.0064	.0341	-.0092	.0014	-.0041
8.49	-.0368	-.0001	.0116	-.0078	.0019	-.0055
10.62	-.0308	-.0063	.0172	-.0084	.0020	-.0050
			δ = -10.5			
- 2.15	-.0852	.0100	.0517	-.0160	-.0025	-.0002
- .00	-.0833	.0081	.0517	-.0166	-.0018	-.0020
2.13	-.1001	.0013	.0591	-.0186	-.0010	-.0036
4.26	-.1022	-.0022	.0447	-.0182	.0006	-.0060
6.38	-.0936	-.0070	.0578	-.0172	.0016	-.0071
8.49	-.0900	-.0121	.0482	-.0136	.0022	-.0090
10.58	-.0986	-.0152	.0416	-.0148	.0029	-.0091
			δ = -14.5			
- 2.15	-.1073	.0150	.0624	-.0200	-.0039	.0054
- .01	-.1056	.0120	.0636	-.0212	-.0030	.0051
2.12	-.1161	.0076	.0667	-.0222	-.0019	.0028
4.25	-.1214	.0049	.0516	-.0220	-.0001	.0002
6.38	-.1148	-.0073	.0717	-.0223	.0012	-.0021
8.50	-.1047	-.0092	.0578	-.0154	.0019	-.0042
10.62	-.1170	-.0153	.0711	-.0181	.0024	-.0053
			δ = -29.3			
- .05	-.1811	.0275	.0930	-.0331	-.0077	.0142
2.10	-.2040	.0204	.1081	-.0370	-.0066	.0127
4.25	-.1989	.0154	.0933	-.0403	-.0039	.0086
6.37	-.1770	.0047	.1024	-.0373	-.0008	.0031
8.48	-.1667	-.0042	.0935	-.0324	.0019	-.0018
10.58	-.1414	-.0063	.0705	-.0265	.0022	-.0045



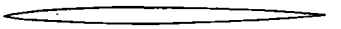
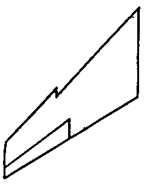


TABLE 9.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2} = 0.50$; M = 0.40

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.04	.0173	.0003	-.0105	.0052	-.0002	-.0029
.01	.0281	.0007	-.0129	.0050	-.0005	-.0038
2.05	.0154	.0003	-.0141	.0049	-.0005	-.0012
4.11	.0127	.0010	-.0085	.0050	-.0006	-.0012
6.17	.0082	.0009	-.0115	.0052	-.0008	.0006
8.24	.0066	.0002	-.0095	.0049	-.0006	.0014
10.29	.0177	.0027	-.0116	.0068	-.0011	.0034
12.36	.0219	.0031	-.0065	.0038	-.0011	.0040
14.40	.0145	.0032	-.0048	.0022	-.0012	.0001
16.45	.0254	.0025	-.0047	.0030	-.0013	.0002
18.48	-.0009	.0000	-.0038	.0027	-.0013	.0026
20.48	.0134	.0199	.0035	.0023	-.0017	.0044
23.50	.0170	.0234	.0032	.0014	-.0007	.0012
			δ = 7.7			
- 2.06	.0215	.0011	-.0435	.0117	-.0006	-.0032
.01	.0383	.0016	-.0334	.0119	-.0008	.0014
2.06	.0341	.0020	-.0489	.0119	-.0010	.0041
4.11	.0409	.0037	-.0457	.0119	-.0014	.0040
6.17	.0317	.0041	-.0149	.0107	-.0014	.0057
8.23	.0344	.0045	-.0447	.0101	-.0014	.0083
10.29	.0503	.0088	-.0484	.0115	-.0021	.0076
12.34	.0365	.0082	-.0357	.0085	-.0028	.0059
14.39	.0149	.0046	-.0351	.0060	-.0028	.0045
16.43	.0261	.0040	-.0350	.0066	-.0031	.0046
18.47	-.0043	.0001	-.0284	.0060	-.0032	.0052
20.48	.0453	.0333	-.0272	.0054	-.0038	.0062
23.48	.0182	.0252	-.0332	.0052	-.0042	.0016
			δ = 13.2			
- 2.04	.0570	.0023	-.0621	.0207	-.0014	-.0025
- .01	.0628	.0041	-.0679	.0209	-.0021	-.0051
2.05	.0598	.0046	-.0623	.0200	-.0023	-.0015
4.11	.0569	.0069	-.0597	.0198	-.0030	-.0026
6.17	.0520	.0084	-.0812	.0184	-.0036	-.0011
8.22	.0405	.0074	-.0645	.0165	-.0037	.0012
10.29	.0471	.0107	-.0579	.0176	-.0045	.0003
12.34	.0380	.0110	-.0418	.0133	-.0054	-.0024
14.39	.0848	.0126	-.0397	.0104	-.0055	-.0047
16.43	.0273	.0072	-.0410	.0109	-.0060	-.0048
18.47	.0150	.0090	-.0360	.0105	-.0063	-.0041
20.46	.0151	.0247	-.0328	.0084	-.0070	-.0036
23.49	.0037	.0215	-.0044	.0074	-.0069	-.0064
			δ = 28.2			
- 2.04	.1281	.0124	-.0898	.0397	-.0079	-.0183
.02	.1318	.0145	-.0894	.0377	-.0085	-.0184
2.08	.1221	.0180	-.0842	.0359	-.0092	-.0159
4.18	.1338	.0225		.0352	-.0106	-.0167
6.19	.1152	.0244	-.1056	.0345	-.0112	-.0145
8.25	.1018	.0250	-.0768	.0293	-.0114	-.0143
10.30	.0971	.0281	-.0681	.0285	-.0122	-.0163
12.35	.0722	.0271	-.0534	.0236	-.0132	-.0156
14.38	.0511	.0258	-.0735	.0169	-.0128	-.0181
16.44	.0357	.0195	-.0427	.0170	-.0137	-.0185
18.46	-.0091	.0107	-.0373	.0159	-.0143	-.0190
20.48	.0358	.0406	-.0422	.0144	-.0161	-.0212
23.50	.0256	.0547	-.0381	.0116	-.0166	-.0259

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.05	-.0315	.0016	-.0081	-.0090	-.0008	-.0077
- .02	-.0311	.0008	-.0081	-.0098	-.0007	-.0086
2.04	-.0350	-.0014	-.0085	-.0094	-.0005	-.0077
4.10	-.0441	-.0029	-.0062	-.0098	-.0001	-.0078
6.15	-.0401	-.0045	-.0269	-.0085	.0002	-.0066
8.23	-.0197	-.0036	-.0135	-.0078	.0008	-.0045
10.29	-.0103	-.0025	-.0157	-.0075	.0012	-.0042
12.34	-.0204	-.0063	-.0149	-.0063	.0012	-.0031
14.38	-.0189	-.0063	-.0156	-.0057	.0013	-.0039
16.42	-.0357	-.0166	-.0178	-.0050	.0014	-.0049
18.46	-.0305	-.0112	-.0144	-.0053	.0019	-.0039
20.47	-.0254	.0044	-.0167	-.0049	.0012	-.0031
23.48	.0411	.0013	-.0146	-.0046	.0015	-.0074
			δ = -10.3			
- 2.29	-.5167	.0201	-.0189	-.0167	-.0012	-.0113
- .01	-.0410	.0015	.0147	-.0170	-.0009	-.0123
2.05	-.0479	-.0013	.0146	-.0162	-.0010	-.0163
4.11	-.0369	-.0027	.0146	-.0166	.0001	-.0069
6.16	-.0405	-.0042	-.0109	-.0134	.0002	-.0047
8.24	-.0234	-.0041	.0029	-.0123	.0012	-.0033
10.28	-.0267	-.0055	.0048	-.0120	.0021	-.0020
12.33	-.0361	-.0093	.0018	-.0096	.0024	-.0032
14.37	-.0578	-.0154	-.0067	-.0099	.0031	-.0019
16.43	-.0356	-.0161	.0036	-.0084	.0031	-.0004
18.45	-.0626	-.0199	-.0044	-.0094	.0039	.0003
20.46	-.0308	.0065	-.0162	-.0074	.0025	.0039
23.47	-.0363	-.0007	-.0064	-.0061	.0027	.0084
			δ = -15.2			
- 2.06	-.0420	.0060	.0322	-.0219	-.0023	-.0095
- .00	-.0495	.0043	.0357	-.0233	-.0023	-.0125
2.06	-.0565	.0012	.0334	-.0230	-.0020	-.0086
8.23	-.0412	-.0060	.0152	-.0181	.0010	-.0032
10.29	-.0351	-.0053	.0186	-.0167	.0024	-.0027
12.33	-.0397	-.0091	.0130	-.0139	.0029	-.0038
14.38	-.0332	-.0085	.0068	-.0139	.0037	-.0036
16.42	-.0393	-.0161	.0083	-.0123	.0037	-.0023
18.44	-.0888	-.0264	.0065	-.0131	.0047	-.0029
20.44	-.0718	-.0030	-.0093	-.0107	.0038	.0009
23.45	-.0927	-.0240	.0026	-.0092	.0045	.0081
			δ = -31.3			
- 2.06	-.1022	.0193	.0732	-.0392	-.0088	.0042
- .02	-.1111	.0172	.0803	-.0434	-.0086	.0020
2.04	-.1244	.0135	.0820	-.0459	-.0081	.0066
4.10	-.1149	.0096	.0807	-.0455	-.0062	.0084
6.17	-.1166	.0023	.0513	-.0418	-.0035	.0130
8.22	-.0920	-.0041	.0524	-.0364	-.0007	.0107
10.28	-.0788	-.0061	.0449	-.0308	.0024	.0099
12.34	-.0612	-.0077	.0382	-.0269	.0036	.0081
14.38	-.0607	-.0101	.0279	-.0266	.0051	.0073
16.42	-.0768	-.0217	.0294	-.0244	.0058	.0076
18.44	-.1224	-.0319	.0257	-.0250	.0075	.0072
20.47	-.0563	.0049	.0148	-.0233	.0082	.0104
23.48	-.0740	-.0111	.0258	-.0196	.0086	.0137



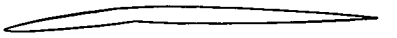
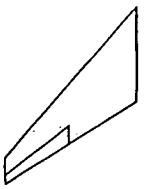


TABLE 9.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.40 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.05	.0487	-.0020	.0066	.0057	.0002	.0053
- .01	.0299	-.0001	-.0011	.0053	-.0000	.0052
2.04	.0413	.0010	.0057	.0059	-.0003	.0053
4.11	.0327	.0017	.0079	.0054	-.0002	.0044
6.16	.0346	.0039	.0169	.0052	-.0007	.0076
8.23	.0385	.0049	-.0039	.0053	-.0006	.0061
10.28	.0221	.0033	.0156	.0043	-.0009	.0039
12.33	.0497	.0097	.0027	.0023	-.0010	-.0016
14.37	.0326	.0088	.0163	.0033	-.0013	.0037
16.43	.0426	.0118	.0140	.0031	-.0016	.0044
18.46	.0288	.0109	.0159	.0031	-.0017	.0044
20.49	.0159	.0068	.0209	.0022	-.0014	.0042
23.51	.0326	.0149	.0106	.0032	-.0018	.0025
			δ = 7.7			
- 2.05	.0439	-.0008	-.0092	.0117	-.0000	.0086
- .00	.0644	.0005	-.0171	.0114	-.0005	.0086
2.06	.0629	.0031	-.0084	.0120	-.0012	.0067
4.12	.0498	.0038	-.0127	.0114	-.0012	.0067
6.17	.0625	.0073	-.0000	.0108	-.0018	.0091
8.22	.0435	.0078	-.0197	.0102	-.0018	.0090
10.28	.0278	.0065	.0028	.0087	-.0019	.0069
12.33	.0385	.0083	.0006	.0051	-.0024	-.0001
14.37	.0451	.0129	.0039	.0070	-.0029	.0055
16.42	.0650	.0194	.0023	.0068	-.0033	.0071
18.46	.0467	.0181	-.0023	.0066	-.0038	.0052
20.49	.0209	.0110	.0169	.0043	-.0032	.0048
23.51	.0419	.0208	.0011	.0064	-.0040	.0023
			δ = 13.2			
- 2.06	.0798	-.0016	-.0249	.0205	-.0006	.0112
- .00	.0670	.0022	-.0261	.0203	-.0014	.0110
2.05	.0791	.0042	-.0225	.0209	-.0023	.0109
4.11	.0510	.0052	-.0278	.0193	-.0025	.0098
6.17	.0683	.0088	-.0147	.0190	-.0034	.0122
8.22	.0491	.0083	-.0345	.0180	-.0038	.0102
10.28	.0525	.0096	-.0135	.0167	-.0044	.0090
12.34	.0722	.0156	-.0120	.0118	-.0052	-.0000
14.36	.0402	.0133	-.0055	.0120	-.0054	.0053
16.42	.0659	.0167	-.0068	.0115	-.0061	.0068
18.47	.0840	.0310	.0009	.0099	-.0067	.0047
20.49	.0250	.0134	.0083	.0070	-.0061	.0041
23.50	.0288	.0173	.0004	.0113	-.0025	.0051
			δ = 28.2			
- 2.05	.1341	.0095	-.0943	.0417	-.0066	-.0007
.01	.1546	.0147	-.0898	.0390	-.0084	-.0013
2.07	.1462	.0184	-.0785	.0378	-.0092	-.0016
4.13	.1365	.0211	-.0824	.0359	-.0096	-.0007
6.18	.1394	.0254	-.0582	.0348	-.0109	.0006
8.23	.1228	.0272	-.0897	.0329	-.0114	-.0004
10.28	.1059	.0272	-.0611	.0289	-.0116	-.0028
12.34	.1151	.0339	-.0572	.0223	-.0125	-.0102
14.38	.0874	.0341	-.0443	.0205	-.0132	-.0071
16.43	.1019	.0409	-.0402	.0183	-.0139	-.0068
18.47	.0970	.0451	-.0314	.0151	-.0143	-.0083
20.49	.0420	.0303	-.0145	.0092	-.0133	-.0119
23.50	.0620	.0413	-.0335	.0137	-.0151	-.0113

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.08	-.0079	.0004	.0237	-.0095	-.0004	.0058
- .02	-.0143	.0002	.0351	-.0092	-.0000	.0076
2.04	-.0125	-.0000	.0319	-.0090	-.0002	.0048
4.10	-.0210	-.0004	.0311	-.0094	.0005	.0041
6.15	-.0133	-.0001	.0435	-.0095	.0003	.0074
8.20	-.0235	-.0022	.0154	-.0093	.0009	.0068
10.26	-.0247	-.0043	.0360	-.0085	.0012	.0051
12.33	.0236	.0040	.0306	-.0090	.0011	.0007
14.36	-.0035	-.0006	.0284	-.0058	.0014	.0065
16.41	.0061	.0014	.0199	-.0052	.0019	.0104
18.45	-.0018	.0006	.0283	-.0054	.0020	.0076
20.47	-.0190	-.0066	.0269	-.0042	.0026	.0097
23.50	.0084	.0019	.0204	-.0038	.0025	.0070
			δ = -10.3			
- 2.05	.0072	.0013	.0508	-.0158	-.0021	-.0042
- .01	-.0087	.0017	.0461	-.0158	-.0012	-.0039
2.05	-.0090	.0004	.0538	-.0157	-.0011	-.0040
4.10	-.0108	-.0021	.0464	-.0159	-.0005	-.0030
6.16	-.0200	-.0042	.0594	-.0159	-.0000	-.0008
8.21	-.0140	-.0035	.0357	-.0147	.0010	-.0001
10.29	-.0186	-.0048	.0494	-.0123	.0016	-.0019
12.32	-.0158	-.0036	.0429	-.0120	.0024	-.0077
14.37	-.0067	-.0028	.0465	-.0087	.0026	-.0030
16.41	-.0036	-.0024	.0385	-.0081	.0031	-.0005
18.45	-.0195	-.0036	.0393	-.0074	.0041	.0009
20.47	-.0399	-.0074	.0347	-.0054	.0046	.0031
23.49	-.0325	-.0118	.0337	-.0037	.0040	.0150
			δ = -15.2			
- 2.06	-.0317	.0043	.0553	-.0220	-.0034	.0058
- .03	-.0371	.0032	.0570	-.0223	-.0022	.0074
2.03	-.0557	.0007	.0617	-.0225	-.0019	.0059
4.09	-.0612	-.0019	.0568	-.0229	-.0011	.0069
6.14	-.0509	-.0030	.0683	-.0227	-.0005	.0118
8.21	-.0531	-.0051	.0466	-.0209	.0009	.0114
10.27	-.0519	-.0068	.0642	-.0178	.0018	.0098
12.31	-.0337	-.0066	.0552	-.0160	.0027	.0058
14.36	-.0433	-.0084	.0559	-.0126	.0033	.0079
16.38	-.0578	-.0133	.0478	-.0114	.0040	.0117
18.43	-.0498	-.0102	.0490	-.0109	.0051	.0132
20.46	-.0697	-.0157	.0422	-.0083	.0059	.0156
23.49	-.0398	-.0144	.0390	-.0071	.0060	.0253
			δ = -31.3			
- 2.06	-.0794	.0180	.1044	-.0417	-.0104	.0100
- .03	-.0805	.0160	.1015	-.0416	-.0086	.0131
2.03	-.0802	.0130	.1098	-.0425	-.0076	.0118
4.09	-.0952	.0102	.1063	-.0445	-.0066	.0124
6.16	-.0805	.0082	.1196	-.0457	-.0050	.0200
8.22	-.0786	.0042	.0947	-.0437	-.0025	.0199
10.27	-.0854	.0392	.1001	-.0376	.0000	.0169
12.32	-.0521	.0003	.0846	-.0317	.0026	.0104
14.36	-.0610	-.0068	.0809	-.0277	.0038	.0115
16.42	-.0385	-.0047	.0780	-.0274	.0058	.0132
18.45	-.0588	-.0082	.0747	-.0273	.0076	.0146
20.46	-.0924	-.0190	.0683	-.0241	.0096	.0174
23.49	-.0402	-.0133	.0497	-.0131	.0095	.0228



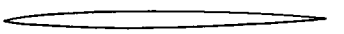
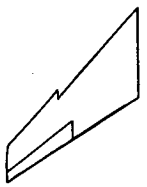


TABLE 10.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2} = 0.50$; M = 0.60

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.08	.0165	-.0025	-.0032	.0047	-.0002	-.0008
.01	.0159	.0004	-.0019	.0049	-.0004	.0005
2.09	.0152	.0002	-.0038	.0048	-.0005	-.0001
4.18	.0055	.0012	.0104	.0048	-.0008	-.0008
6.26	.0072	.0001	-.0020	.0046	-.0009	-.0012
8.35	.0091	.0015	-.0035	.0074	-.0010	-.0008
10.45	.0123	.0033	.0013	.0048	-.0018	-.0022
12.52	.0081	.0037	.0021	-.0019	-.0000	-.0022
14.60	.0106	.0058	.0017	.0031	-.0015	-.0021
16.66	.0236	.0062	-.0004	.0030	-.0013	-.0020
18.67	.0029	.0003	.0022	.0039	-.0022	-.0035
20.67	.0281	.0062	.0055	.0032	-.0023	-.0045
23.71	.0228	.0038	.0033	.0036	-.0037	-.0077
			δ = 7.7			
- 2.08	.0309	-.0021	-.0298	.0113	-.0005	.0022
- .01	.0325	.0012	-.0359	.0117	-.0009	.0021
2.09	.0398	.0017	-.0280	.0113	-.0010	.0033
4.17	-.0327	.0036	-.0367	.0110	-.0015	.0025
6.25	.0270	.0030	-.0267	.0104	-.0018	.0020
8.35	.0315	.0053	-.0265	.0116	-.0023	.0011
10.44	.0205	.0063	-.0212	.0096	-.0033	-.0022
12.52	.0299	.0094	-.0164	.0069	-.0029	-.0014
14.60	.0239	.0102	-.0175	.0073	-.0033	-.0014
16.63	.0231	.0073	-.0190	.0069	-.0034	-.0024
18.66	.0208	.0073	-.0149	.0073	-.0044	-.0038
20.64	.0246	.0063	-.0164	.0057	-.0042	-.0044
23.71	.0313	.0091	-.0116	.0061	-.0061	-.0078
			δ = 13.2			
- 2.08	.0645	-.0003	-.0473	.0199	-.0017	-.0018
- .00	.0640	.0038	-.0491	.0203	-.0022	-.0010
2.08	.0607	.0045	-.0496	.0191	-.0025	-.0012
4.17	-.0663	.0075	-.0574	.0196	-.0035	-.0031
6.26	.0560	.0082	-.0416	.0180	-.0039	-.0037
8.35	.0554	.0109	-.0433	.0169	-.0049	-.0075
10.46	.0688	.0171	-.0331	.0161	-.0062	-.0088
12.53	.0444	.0133	-.0247	.0110	-.0054	-.0083
14.60	.0316	.0144	-.0247	.0117	-.0062	-.0097
16.64	.0378	.0141	-.0273	.0117	-.0066	-.0103
18.66	.0354	.0147	-.0232	.0112	-.0080	-.0138
20.66	.0523	.0195	-.0221	.0088	-.0075	-.0143
23.70	.0375	.0146	-.0236	.0083	-.0088	-.0149
			δ = 28.2			
- 2.08	.1141	.0105	-.0801	.0365	-.0081	-.0140
.01	.1254	.0159	-.0853	.0362	-.0089	-.0137
2.09	.1178	.0177	-.0828	.0344	-.0095	-.0138
4.18	.1060	.0218	-.0909	.0337	-.0108	-.0167
6.27	.1156	.0241	-.0771	.0330	-.0117	-.0178
8.38	.1081	.0267	-.0655	.0299	-.0121	-.0193
10.47	.0940	.0309	-.0530	.0285	-.0144	-.0235
12.54	.0651	.0288	-.0374	.0193	-.0129	-.0227
14.63	.0790	.0366	-.0384	.0200	-.0145	-.0248
16.66	.0827	.0340	-.0374	.0195	-.0155	-.0261
18.68	.0627	.0332	-.0384	.0193	-.0178	-.0317
20.67	.0770	.0409	-.0401	.0143	-.0167	-.0307
23.71	.0583	.0342	-.0341	.0116	-.0171	-.0298

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.09	-.0295	-.0009	.0235	-.0095	-.0006	-.0047
- .00	-.0269	.0006	.0207	-.0098	-.0006	-.0034
2.08	-.0314	-.0008	.0158	-.0097	-.0005	-.0048
4.17	-.0426	-.0013	.0108	-.0097	-.0003	-.0058
6.26	-.0351	-.0033	.0183	-.0083	.0001	-.0053
8.36	-.0179	-.0021	.0136	-.0060	-.0000	-.0063
10.44	-.0260	-.0038	.0145	-.0056	.0006	-.0058
12.51	-.0282	-.0050	.0151	-.0053	.0009	-.0052
14.59	-.0314	-.0056	.0098	-.0056	.0011	-.0058
16.63	-.0207	-.0073	.0076	-.0052	.0012	-.0067
18.65	-.0274	-.0107	.0113	-.0042	.0007	-.0085
20.64	-.0156	-.0114	.0121	-.0045	.0007	-.0100
23.71	-.0105	-.0122	.0140	-.0050	.0010	-.0095
			δ = -10.3			
- 2.08	-.0271	.0003	.0372	-.0163	-.0010	-.0045
.01	-.0303	.0015	.0326	-.0169	-.0010	-.0046
2.10	-.0158	-.0004	.0309	-.0162	-.0007	-.0039
4.19	-.0209	-.0003	.0212	-.0159	-.0001	-.0028
6.27	-.0111	-.0003	.0272	-.0134	-.0002	-.0028
8.37	-.0137	-.0019	.0260	-.0109	.0005	-.0025
10.45	-.0330	-.0044	.0324	-.0120	.0021	-.0031
12.52	-.0203	-.0027	.0278	-.0093	.0022	-.0024
14.58	-.0408	-.0069	.0211	-.0088	.0025	-.0022
16.64	-.0315	-.0088	.0210	-.0084	.0028	-.0021
18.62	-.0589	-.0164	.0061	-.0084	.0028	-.0013
20.64	-.0215	-.0116	.0161	-.0069	.0020	.0007
23.69	-.0225	-.0167	.0207	-.0053	.0009	.0132
			δ = -15.2			
- 2.07	-.0427	.0038	.0598	-.0210	-.0024	-.0065
.02	-.0481	.0051	.0587	-.0228	-.0023	-.0075
2.10	-.0409	.0023	.0572	-.0224	-.0018	-.0060
4.18	-.0506	.0010	.0474	-.0221	-.0009	-.0055
6.28	-.0479	-.0017	.0528	-.0186	-.0004	-.0065
8.37	-.0315	-.0012	.0483	-.0142	.0008	-.0074
10.46	-.0433	-.0043	.0517	-.0159	.0022	-.0089
12.53	-.0427	-.0052	.0443	-.0130	.0026	-.0081
14.62	-.0132	.0018	.0416	-.0124	.0031	-.0075
16.64	-.0417	-.0105	.0384	-.0122	.0037	-.0083
18.63	-.0628	-.0157	.0241	-.0126	.0045	-.0065
20.64	-.0320	-.0136	.0343	-.0109	.0036	-.0066
23.70	-.0248	-.0148	.0378	-.0102	.0038	.0030
			δ = -31.3			
- 2.07	-.0919	.0174	.0913	-.0380	-.0093	.0052
.02	-.0919	.0166	.0871	-.0394	-.0084	.0092
2.10	-.0978	.0139	.0902	-.0411	-.0083	.0095
4.18	-.1097	.0101	.0813	-.0412	-.0062	.0117
6.27	-.0906	.0051	.0840	-.0377	-.0040	.0098
8.37	-.0672	-.0012	.0647	-.0292	-.0011	.0050
10.45	-.0804	-.0070	.0654	-.0277	.0015	.0026
12.51	-.0809	-.0085	.0586	-.0249	.0027	.0017
14.59	-.0877	-.0123	.0537	-.0241	.0035	.0015
16.64	-.0746	-.0106	.0543	-.0247	.0046	.0012
18.64	-.0851	-.0153	.0421	-.0255	.0064	-.0001
20.65	-.0614	-.0160	.0533	-.0242	.0060	.0030
23.69	-.0748	-.0278	.0590	-.0209	.0044	.0150



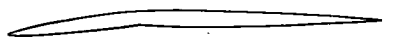
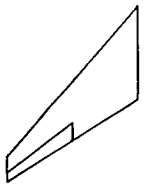


TABLE 10.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.60 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.09	.0351	-.0015	.0026	.0050	-.0000	.0021
- .00	.0257	-.0000	-.0012	.0052	-.0002	.0052
2.08	.0262	.0007	.0018	.0053	-.0002	.0030
4.17	.0319	.0014	.0067	.0055	-.0004	.0029
6.26	.0369	.0034	.0025	.0055	-.0006	.0028
8.34	.0202	.0024	.0012	.0052	-.0007	.0026
10.44	.0050	.0022	-.0077	.0040	-.0008	.0024
12.50	.0328	.0072	.0066	.0036	-.0010	.0015
14.56	-.0026	.0006	.0053	.0033	-.0013	.0011
16.62	.0233	.0082	.0059	.0034	-.0015	.0012
18.66	-.0002	.0016	.0024	.0027	-.0016	.0006
20.69	.0186	.0087	.0116	.0016	-.0015	.0005
23.71	.0094	.0049	.0048	.0027	-.0019	.0005
			δ = 7.7			
- 2.10	.0421	-.0008	-.0124	.0107	-.0000	.0082
- .01	.0383	.0012	-.0237	.0111	-.0006	.0072
2.08	.0498	.0021	-.0215	.0117	-.0009	.0054
4.16	.0464	.0035	-.0190	.0114	-.0012	.0047
6.24	.0503	.0055	-.0203	.0114	-.0015	.0046
8.34	.0444	.0066	-.0210	.0105	-.0019	.0039
10.43	.0154	.0046	-.0311	.0087	-.0018	.0044
12.49	.0257	.0066	-.0059	.0081	-.0024	.0023
14.55	.0120	.0055	-.0102	.0069	-.0027	.0019
16.61	.0295	.0115	-.0042	.0068	-.0032	.0014
18.65	.0068	.0050	-.0061	.0056	-.0036	.0001
20.69	.0353	.0157	.0085	.0031	-.0032	-.0005
23.71	.0321	.0160	-.0037	.0054	-.0042	-.0000
			δ = 13.2			
- 2.10	.0613	-.0003	-.0296	.0193	-.0008	.0048
- .01	.0576	.0027	-.0362	.0197	-.0017	.0064
2.07	.0664	.0042	-.0327	.0200	-.0024	.0040
4.15	.0597	.0054	-.0334	.0186	-.0027	.0036
6.25	.0659	.0080	-.0346	.0190	-.0034	.0033
8.34	.0575	.0093	-.0308	.0179	-.0040	.0025
10.42	.0331	.0082	-.0405	.0155	-.0043	.0020
12.50	.0525	.0130	-.0161	.0143	-.0050	-.0002
14.55	.0171	.0083	-.0158	.0119	-.0056	-.0019
16.61	.0506	.0190	-.0147	.0115	-.0064	-.0029
18.65	.0160	.0094	-.0130	.0093	-.0067	-.0039
20.69	.0330	.0163	.0069	.0057	-.0063	-.0052
23.71	.0274	.0164	-.0087	.0087	-.0080	-.0057
			δ = 28.2			
- 2.10	.1220	.0085	-.0687	.0365	-.0063	-.0029
- .00	.1204	.0144	-.0797	.0364	-.0086	-.0066
2.08	.1328	.0177	-.0743	.0351	-.0094	-.0100
4.17	.1281	.0204	-.0716	.0339	-.0101	-.0100
6.25	.1234	.0240	-.0751	.0334	-.0112	-.0109
8.34	.1087	.0248	-.0748	.0314	-.0116	-.0122
10.41	.0759	.0235	-.0804	.0272	-.0117	-.0114
12.50	.0998	.0302	-.0479	.0241	-.0125	-.0135
14.58	.0825	.0326	-.0461	.0204	-.0136	-.0159
16.76	.0846	.0366		.0178	-.0141	-.0181
18.81	.0723	.0359		.0134	-.0142	-.0205
20.70	.0568	.0388	-.0079	.0040	-.0135	-.0254
23.70	.0621	.0417	-.0380	.0126	-.0165	-.0230

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.11	-.0260	.0015	.0212	-.0096	-.0006	.0010
- .02	-.0270	.0003	.0256	-.0094	-.0003	.0044
2.06	-.0232	-.0006	.0319	-.0096	-.0001	.0009
4.17	-.0172	-.0008	.0337	-.0096	.0002	.0009
6.25	-.0191	-.0011	.0289	-.0094	.0007	.0025
8.34	-.0251	-.0026	.0282	-.0087	.0009	.0026
10.41	-.0424	-.0052	.0115	-.0081	.0013	.0033
12.49	-.0180	-.0037	.0254	-.0056	.0012	.0041
14.56	-.0249	-.0052	.0233	-.0061	.0017	.0032
16.61	-.0106	-.0009	.0229	-.0058	.0021	.0044
18.65	-.0170	-.0040	.0222	-.0059	.0024	.0054
20.68	-.0055	-.0004	.0248	-.0048	.0031	.0058
23.70	-.0157	-.0069	.0194	-.0049	.0027	.0046
			δ = -10.3			
- 2.08	-.0023	.0001	.0436	-.0159	-.0021	.0005
- .01	-.0194	.0011	.0354	-.0158	-.0012	-.0010
2.09	-.0062	-.0002	.0413	-.0156	-.0008	-.0021
4.17	-.0079	-.0021	.0417	-.0157	-.0001	-.0012
6.26	-.0075	-.0028	.0388	-.0152	.0007	-.0001
8.36	-.0120	-.0026	.0344	-.0133	.0014	-.0006
10.44	-.0321	-.0040	.0181	-.0114	.0020	-.0003
12.50	-.0224	-.0001	.0380	-.0066	.0027	.0027
14.56	-.0517	-.0111	.0320	-.0087	.0031	.0010
16.60	-.0386	-.0084	.0347	-.0084	.0037	.0007
18.65	-.0451	-.0112	.0299	-.0082	.0047	.0021
20.68	-.0261	-.0043	.0315	-.0072	.0060	.0070
23.71	-.0315	-.0119	.0343	-.0051	.0045	.0229
			δ = -15.2			
- 2.08	-.0241	.0031	.0569	-.0216	-.0033	.0049
- .01	-.0451	.0031	.0524	-.0215	-.0021	.0081
2.07	-.0436	.0010	.0541	-.0217	-.0016	.0049
4.17	-.0373	-.0017	.0560	-.0218	-.0007	.0066
6.27	-.0316	-.0031	.0524	-.0215	.0005	.0085
8.34	-.0400	-.0044	.0467	-.0189	.0012	.0074
10.43	-.0524	-.0042	.0306	-.0158	.0022	.0081
12.49	-.0469	-.0035	.0476	-.0104	.0031	.0099
14.55	-.0619	-.0122	.0391	-.0128	.0037	.0084
16.60	-.0554	-.0118	.0423	-.0123	.0047	.0082
18.64	-.0800	-.0203	.0388	-.0123	.0060	.0082
20.66	-.0517	-.0120	.0361	-.0113	.0077	.0128
23.70	-.0448	-.0161	.0407	-.0088	.0057	.0285
			δ = -31.3			
- 2.09	-.0891	.0185	.0971	-.0396	-.0106	.0136
- .01	-.0934	.0165	.0884	-.0375	-.0088	.0154
2.08	-.0922	.0132	.0948	-.0398	-.0077	.0122
4.17	-.0882	.0100	.0991	-.0412	-.0066	.0145
6.25	-.0850	.0065	.0960	-.0411	-.0046	.0167
8.35	-.0871	.0031	.0872	-.0383	-.0024	.0164
10.45	-.0716	.0022	.0635	-.0319	.0003	.0146
12.50	-.0690	-.0004	.0760	-.0245	.0025	.0153
14.55	-.1049	-.0161	.0679	-.0266	.0039	.0119
16.61	-.0844	-.0134	.0708	-.0264	.0054	.0106
18.65	-.0957	-.0185	.0670	-.0279	.0079	.0109
20.66	-.0792	-.0142	.0662	-.0263	.0105	.0137
23.71	-.0805	-.0235	.0694	-.0227	.0085	.0287



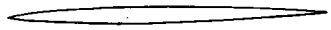
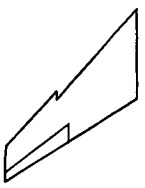


TABLE 11.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.70

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.10	.0148	-.0005	-.0036	.0045	-.0001	-.0013
- .00	.0206	-.0001	-.0047	.0052	-.0004	-.0005
2.12	.0166	-.0001	-.0027	.0047	-.0004	-.0003
4.20	.0052	-.0002	-.0052	.0051	-.0008	-.0005
6.30	.0108	.0004	-.0075	.0047	-.0010	-.0017
8.43	.0241	.0027	-.0030	.0031	-.0010	-.0021
10.53	.0122	.0022	-.0013	.0031	-.0011	-.0022
12.62	.0185	.0032	-.0112	.0030	-.0012	-.0021
14.69	.0174	.0113	-.0238	.0032	-.0014	-.0019
16.74	.0207	.0046	.0018	.0031	-.0015	-.0020
18.74	.0113	.0027	-.0041	.0028	-.0021	-.0034
20.75	.0052	.0014	.0014	.0023	-.0023	-.0043
23.80	.0083	.0033	-.0010	.0030	-.0033	-.0072
			δ = 7.7			
- 2.11	.0283	-.0003	-.0284	.0106	-.0005	-.0006
- .00	.0325	.0008	-.0284	.0113	-.0008	.0023
2.09	.0325	.0012	-.0287	.0106	-.0010	.0021
4.19	.0253	.0017	-.0309	.0110	-.0014	.0019
6.30	.0280	.0029	-.0249	.0101	-.0019	.0008
8.41	.0321	.0048	-.0224	.0081	-.0023	-.0017
10.52	.0245	.0057	-.0191	.0083	-.0027	-.0022
12.61	.0422	.0096	-.0268	.0072	-.0028	-.0022
14.68	.0299	.0082	-.0415	.0072	-.0032	-.0030
16.72	.0312	.0087	-.0160	.0064	-.0034	-.0031
18.73	.0296	.0095	-.0190	.0061	-.0043	-.0053
20.74	.0120	.0050	-.0156	.0052	-.0045	-.0055
23.79	.0191	.0094	-.0165	.0058	-.0061	-.0097
			δ = 13.2			
- 2.11	.0557	.0016	-.0474	.0195	-.0017	-.0050
- .01	.0597	.0036	-.0474	.0198	-.0023	-.0019
2.09	.0555	.0042	-.0455	.0182	-.0024	-.0023
4.19	.0522	.0058	-.0486	.0189	-.0034	-.0030
6.29	.0428	.0064	-.0448	.0172	-.0040	-.0057
8.42	.0506	.0094	-.0420	.0138	-.0047	-.0086
10.53	.0508	.0123	-.0331	.0140	-.0053	-.0092
12.60	.0396	.0109	-.0382	.0116	-.0053	-.0101
14.69	.0541	.0165	-.0507	.0124	-.0064	-.0110
16.72	.0417	.0138	-.0276	.0108	-.0065	-.0119
18.73	.0561	.0216	-.0328	.0097	-.0076	-.0137
20.73	.0202	.0106	-.0237	.0079	-.0074	-.0133
23.68	-.0894	.0140	-.0371	.0072	-.0082	-.0156
			δ = 28.2			
- 2.09	.1108	.0129	-.0762	.0346	-.0082	-.0145
.01	.1155	.0157	-.0819	.0337	-.0089	-.0151
2.10	.1153	.0180	-.0807	.0329	-.0097	-.0160
4.20	.1094	.0207	-.0824	.0322	-.0108	-.0181
6.31	.1098	.0237	-.0776	.0314	-.0120	-.0202
8.44	.1039	.0259	-.0635	.0262	-.0124	-.0225
10.55	.0969	.0300	-.0591	.0277	-.0140	-.0249
12.62	.0742	.0278	-.0517	.0200	-.0130	-.0238
14.69	.0762	.0314	-.0640	.0210	-.0147	-.0264
16.74	.0762	.0331	-.0386	.0196	-.0155	-.0281
18.75	.0881	.0410	-.0476	.0174	-.0176	-.0332
20.73	.0300	.0234	-.0374	.0126	-.0157	-.0302
23.81	.0522	.0365	-.0392	.0110	-.0173	-.0327

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.10	-.0324	.0013	.0196	-.0101	-.0006	-.0064
- .01	-.0314	.0004	.0195	-.0098	-.0006	-.0045
2.09	-.0286	-.0008	.0184	-.0095	-.0004	-.0051
4.20	-.0373	-.0028	.0188	-.0094	-.0001	-.0050
6.30	-.0324	-.0029	.0178	-.0080	-.0000	-.0054
8.42	-.0187	-.0030	.0140	-.0087	.0005	-.0065
10.52	-.0184	-.0036	.0080	-.0069	.0011	-.0049
12.59	-.0270	-.0072	-.0007	-.0049	.0009	-.0055
14.67	-.0252	-.0066	-.0143	-.0058	.0013	-.0056
16.71	-.0235	-.0087	.0087	-.0051	.0012	-.0063
18.72	-.0143	-.0055	.0043	-.0055	.0008	-.0069
20.74	-.0236	-.0097	.0121	-.0057	.0008	-.0086
23.79	-.0174	-.0089	.0101	-.0054	.0010	-.0095
			δ = -10.3			
- 2.08	-.0202	.0026	.0368	-.0164	-.0012	-.0023
.03	-.0185	.0019	.0338	-.0168	-.0011	-.0043
2.12	-.0162	-.0006	.0320	-.0161	-.0007	-.0031
4.22	-.0238	-.0016	.0277	-.0148	-.0002	-.0022
6.33	-.0169	-.0012	.0257	-.0122	-.0005	-.0027
8.43	-.0274	-.0038	.0301	-.0141	.0015	-.0018
10.52	-.0315	-.0041	.0237	-.0104	.0019	-.0027
12.61	-.0228	-.0052	.0119	-.0082	.0020	-.0034
14.66	-.0371	-.0089	-.0021	-.0088	.0024	-.0032
16.71	-.0297	-.0080	.0200	-.0077	.0023	-.0026
18.71	-.0342	-.0095	.0054	-.0086	.0025	-.0003
20.73	-.0309	-.0107	.0190	-.0082	.0019	.0012
23.79	-.0275	-.0110	.0161	-.0055	-.0001	.0142
			δ = -15.2			
- 2.06	-.0366	.0053	.0568	-.0204	-.0025	-.0057
.03	-.0404	.0047	.0571	-.0223	-.0023	-.0063
2.12	-.0379	.0023	.0553	-.0218	-.0017	-.0060
4.23	-.0357	.0008	.0496	-.0210	-.0008	-.0044
6.33	-.0307	.0002	.0469	-.0177	-.0003	-.0050
8.45	-.0329	-.0021	.0477	-.0191	.0013	-.0062
10.53	-.0521	-.0041	.0430	-.0143	.0020	-.0074
12.61	-.0392	-.0072	.0272	-.0122	.0024	-.0080
14.68	-.0404	-.0070	.0128	-.0130	.0030	-.0082
16.71	-.0422	-.0095	.0356	-.0121	.0032	-.0076
18.70	-.0415	-.0093	.0209	-.0129	.0038	-.0061
20.73	-.0469	-.0147	.0351	-.0126	.0036	-.0035
23.80	-.0402	-.0150	.0334	-.0110	.0031	.0046
			δ = -31.3			
- 2.07	-.0782	.0189	.0853	-.0355	-.0093	.0069
.02	-.0797	.0175	.0830	-.0364	-.0088	.0082
2.11	-.0923	.0140	.0844	-.0373	-.0081	.0098
4.22	-.0915	.0173	.0814	-.0373	-.0058	.0106
6.32	-.0811	.0053	.0742	-.0328	-.0039	.0078
8.43	-.0601	-.0019	.0585	-.0273	.0005	.0022
10.53	-.0634	-.0053	.0478	-.0202	.0019	.0006
12.61	-.0499	-.0058	.0349	-.0185	.0024	-.0009
14.68	-.0704	-.0115	.0189	-.0191	.0030	-.0013
16.72	-.0548	-.0080	.0432	-.0195	.0036	-.0011
18.71	-.0668	-.0119	.0334	-.0211	.0044	-.0004
20.74	-.0749	-.0165	.0482	-.0221	.0041	.0049
23.80	-.0657	-.0155	.0540	-.0213	.0024	.0184



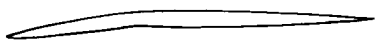
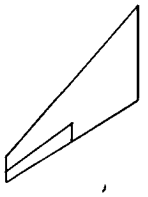


TABLE 11.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.70 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.12	.0260	.0003	-.0017	.0047	-.0000	-.0001
- .02	.0248	.0010	-.0007	.0050	-.0002	.0020
2.10	.0270	.0018	-.0042	.0056	-.0003	.0020
4.19	.0196	.0026	-.0025	.0053	-.0005	.0022
6.30	.0222	.0031	.0014	.0052	-.0006	.0011
8.41	.0221	.0041	-.0024	.0045	-.0007	.0011
10.51	.0051	.0028	-.0000	.0040	-.0007	.0015
12.57	.0111	.0044	.0003	.0031	-.0011	-.0001
14.65	.0189	.0066	.0010	.0034	-.0013	-.0002
16.62	-.0010	.0020		.0035	-.0016	-.0001
18.53	-.0009	.0030		.0033	-.0017	-.0000
20.77	.0290	.0129	.0016	.0129	-.0057	-.0003
23.82	.0253	.0129	.0004	.0022	-.0015	.0008
			δ = 7.7			
- 2.12	.0396	.0008	-.0156	.0102	-.0002	.0042
- .03	.0407	.0021	-.0232	.0110	-.0006	.0038
2.08	.0437	.0034	-.0280	.0113	-.0009	.0030
4.19	.0470	.0051	-.0256	.0111	-.0012	.0035
6.29	.0447	.0064	-.0222	.0107	-.0017	.0021
8.39	.0378	.0068	-.0230	.0100	-.0018	.0016
10.49	.0158	.0056	-.0187	.0087	-.0019	.0023
12.57	.0249	.0077	-.0082	.0072	-.0023	.0013
14.64	.0270	.0094	-.0142	.0070	-.0028	.0007
16.71	.0559	.0188	-.0132	.0069	-.0034	-.0012
18.75	.0281	.0119	-.0118	.0057	-.0036	-.0023
20.77	.0371	.0165	-.0047	.0062	-.0034	-.0007
23.81	.0273	.0153	-.0078	.0048	-.0038	-.0003
			δ = 13.2			
- 2.12	.0651	.0013	-.0324	.0181	-.0011	.0020
- .02	.0585	.0037	-.0355	.0191	-.0018	.0024
2.09	.0691	.0060	-.0423	.0198	-.0025	.0019
4.19	.0622	.0073	-.0368	.0183	-.0031	.0010
6.29	.0574	.0085	-.0373	.0182	-.0038	-.0005
8.40	.0580	.0100	-.0375	.0172	-.0041	-.0007
10.50	.0354	.0093	-.0319	.0149	-.0043	-.0005
12.56	.0308	.0097	-.0200	.0122	-.0048	-.0026
14.65	.0500	.0164	-.0222	.0120	-.0056	-.0036
16.70	.0539	.0197	-.0219	.0107	-.0063	-.0061
18.75	.0354	.0159	-.0172	.0086	-.0066	-.0073
20.76	.0372	.0184	-.0108	.0101	-.0071	-.0061
23.81	.0390	.0228	-.0153	.0075	-.0068	-.0063
			δ = 28.2			
- 2.13	.1159	.0100	-.0758	.0331	-.0064	-.0084
- .02	.1190	.0148	-.0782	.0337	-.0083	-.0114
2.09	.1172	.0187	-.0821	.0329	-.0096	-.0136
4.19	.1136	.0209	-.0752	.0317	-.0103	-.0138
6.29	.1080	.0235	-.0731	.0311	-.0113	-.0161
8.40	.1037	.0258	-.0711	.0295	-.0116	-.0160
10.49	.0800	.0251	-.0667	.0266	-.0116	-.0155
12.59	.0961	.0305	-.0483	.0225	-.0124	-.0167
14.65	.0856	.0339	-.0465	.0197	-.0132	-.0188
16.71	.0869	.0379	-.0451	.0176	-.0142	-.0211
18.77	.0712	.0371	-.0303	.0118	-.0138	-.0236
20.76	.0568	.0348	-.0350	.0151	-.0145	-.0207
23.81	.0728	.0467	-.0383	.0116	-.0154	-.0227

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.13	-.0241	.0027	.0266	-.0091	-.0008	-.0021
- .03	-.0237	.0016	.0253	-.0095	-.0004	-.0009
2.07	-.0288	.0007	.0224	-.0094	-.0002	-.0007
4.19	-.0258	-.0013	.0261	-.0093	.0001	.0001
6.29	-.0269	-.0006	.0284	-.0091	.0004	-.0000
8.40	-.0248	-.0014	.0210	-.0087	.0010	.0011
10.49	-.0394	-.0037	.0211	-.0074	.0013	.0027
12.56	-.0197	-.0024	.0176	-.0069	.0015	.0029
14.65	-.0100	-.0004	.0171	-.0064	.0019	.0029
16.70	-.0043	.0008	.0114	-.0061	.0021	.0037
18.74	-.0208	-.0044	.0162	-.0057	.0027	.0047
20.76	.0055	-.0005	.0046	.0055	.0006	.0076
23.80	-.0109	-.0031	.0146	-.0059	.0033	.0040
			δ = -10.3			
- 2.09	.0026	.0015	.0410	-.0156	-.0020	-.0047
- .00	-.0072	.0027	.0372	-.0151	-.0015	-.0054
2.11	-.0098	.0013	.0344	-.0153	-.0007	-.0039
4.21	-.0079	-.0002	.0364	-.0154	-.0002	-.0039
6.32	-.0158	-.0022	.0376	-.0149	.0006	-.0043
8.42	-.0128	-.0001	.0306	-.0128	.0014	-.0025
10.52	-.0260	-.0051	.0289	-.0104	.0020	-.0032
12.58	-.0396	-.0060	.0364	-.0061	.0023	-.0011
14.64	-.0414	-.0108	.0301	-.0094	.0034	-.0020
16.70	-.0334	-.0087	.0302	-.0098	.0043	-.0013
18.73	-.0528	-.0143	.0214	-.0085	.0057	.0007
20.75	-.0200	-.0099	.0161	.0036	.0032	.0107
23.81	-.0350	-.0132	.0297	-.0062	.0048	.0269
			δ = -15.2			
- 2.10	-.0204	.0045	.0533	-.0213	-.0035	.0025
- .00	-.0379	.0048	.0492	-.0209	-.0022	.0038
2.10	-.0336	.0023	.0476	-.0215	-.0016	.0036
4.20	-.0367	-.0002	.0495	-.0209	-.0008	.0059
6.31	-.0423	-.0020	.0499	-.0207	.0003	.0056
8.42	-.0234	.0002	.0393	-.0179	.0013	.0057
10.52	-.0378	-.0049	.0371	-.0143	.0022	.0057
12.57	-.0494	-.0061	.0427	-.0100	.0027	.0064
14.64	-.0492	-.0102	.0354	-.0136	.0041	.0055
16.70	-.0380	-.0049	.0362	-.0144	.0052	.0058
18.75	-.0447	.0036	.0320	-.0115	.0063	.0084
20.81	-.0039	.0126	.0490	.0036	-.0004	.0250
			δ = -31.3			
- 2.11	-.0735	.0186	.0898	-.0366	-.0102	.0104
- .00	-.0776	.0173	.0855	-.0360	-.0086	.0114
2.10	-.0830	.0149	.0846	-.0370	-.0076	.0108
4.21	-.0862	.0117	.0891	-.0382	-.0065	.0131
6.32	-.0943	.0068	.0884	-.0386	-.0043	.0143
8.41	-.0772	.0048	.0742	-.0336	-.0025	.0129
10.52	-.0651	.0031	.0625	-.0275	.0004	.0099
12.58	-.0729	-.0015	.0643	-.0204	.0019	.0108
14.65	-.0728	-.0072	.0567	-.0237	.0039	.0086
16.70	-.0556	-.0031	.0570	-.0245	.0054	.0075
18.89	.0861	.0462	.0665	-.0240	.0082	.0110
20.74	-.0658	-.0149	.0473	-.0116	.0063	.0161
23.85	-.0332	.0012	.0627	-.0212	.0069	.0332



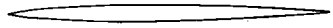
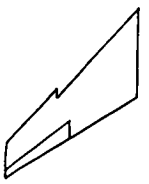


TABLE 12.- INCREMENTAL AERODYNAMIC COEFFICIENTS: $\frac{y_1}{b/2} = 0.50$; M = 0.81

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.12	.0103	-.0002	-.0052	.0050	-.0001	-.0003
- .00	.0159	.0001	-.0040	.0055	-.0003	.0003
2.13	.0117	.0001	-.0026	.0050	-.0004	.0001
4.24	.0104	.0004	-.0051	.0044	-.0005	-.0003
6.37	.0115	.0009	-.0004	.0045	-.0008	-.0010
8.50	.0257	.0035	-.0044	.0039	-.0008	-.0011
10.60	.0130	.0020	-.0032	.0035	-.0012	-.0023
12.69	.0125	.0027	-.0022	.0030	-.0013	-.0024
14.76	.0240	.0067	-.0013	.0026	-.0013	-.0023
16.81	.0169	.0049	-.0029	.0026	-.0014	-.0009
18.81	.0069	.0026	.0001	.0026	-.0019	-.0012
20.83	.0156	.0065	-.0033	.0022	-.0014	-.0013
23.89	.0098	.0052	-.0052	.0024	-.0025	-.0047
			δ = 7.7			
- 2.14	.0282	-.0004	-.0262	.0109	-.0005	.0004
- .01	.0290	.0009	-.0285	.0115	-.0009	.0021
2.11	.0283	.0014	-.0259	.0112	-.0010	.0019
4.24	.0352	.0023	-.0288	.0108	-.0014	.0005
6.35	.0203	.0019	-.0233	.0097	-.0017	-.0008
8.48	.0380	.0055	-.0240	.0082	-.0021	-.0012
10.59	.0209	.0318	-.0197	.0078	-.0027	-.0034
12.68	.0249	.0063	-.0187	.0069	-.0028	-.0035
14.75	.0319	.0091	-.0171	.0062	-.0029	-.0041
16.78	.0247	.0080	-.0198	.0057	-.0032	-.0028
18.80	.0268	.0104	-.0178	.0058	-.0040	-.0041
20.83	.0356	.0152	-.0192	.0051	-.0038	-.0040
23.88	.0249	.0131	-.0174	.0047	-.0048	-.0116
			δ = 13.2			
- 2.13	.0479	.0017	-.0453	.0191	-.0017	-.0027
- .01	.0553	.0040	-.0470	.0199	-.0025	-.0021
2.11	.0475	.0043	-.0429	.0178	-.0027	-.0034
4.22	.0494	.0057	-.0482	.0177	-.0034	-.0047
6.35	.0408	.0064	-.0402	.0160	-.0038	-.0058
8.47	.0444	.0074	-.0410	.0127	-.0051	-.0099
10.60	.0458	.0107	-.0335	.0130	-.0052	-.0103
12.67	.0419	.0121	-.0328	.0120	-.0056	-.0108
14.75	.0535	.0173	-.0277	.0110	-.0059	-.0119
16.79	.0384	.0142	-.0290	.0097	-.0063	-.0110
18.80	.0404	.0172	-.0281	.0094	-.0075	-.0130
20.82	.0485	.0226	-.0295	.0081	-.0069	-.0119
23.88	.0423	.0239	-.0323	.0064	-.0072	-.0133
			δ = 28.2			
- 2.13	.1025	.0126	-.0735	.0324	-.0079	-.0111
- .02	.1042	.0164	-.0785	.0322	-.0094	-.0162
2.11	.0972	.0177	-.0770	.0306	-.0098	-.0176
4.22	.0936	.0197	-.0793	.0294	-.0107	-.0201
6.36	.0926	.0221	-.0725	.0285	-.0118	-.0227
8.49	.0891	.0236	-.0636	.0250	-.0121	-.0234
10.61	.0812	.0256	-.0530	.0232	-.0126	-.0249
12.68	.0622	.0243	-.0464	.0206	-.0131	-.0260
14.77	.0774	.0315	-.0452	.0202	-.0145	-.0289
16.82	.0740	.0339	-.0483	.0168	-.0145	-.0288
18.83	.0755	.0379	-.0443	.0156	-.0162	-.0322
20.85	.0820	.0449	-.0475	.0130	-.0159	-.0309

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.12	-.0317	.0012	.0229	-.0092	-.0006	-.0049
- .00	-.0322	.0006	.0218	-.0095	-.0006	-.0040
2.12	-.0389	-.0008	.0221	-.0089	-.0003	-.0050
4.24	-.0317	-.0016	.0175	-.0087	-.0002	-.0050
6.36	-.0302	-.0030	.0173	-.0070	-.0000	-.0053
8.49	-.0090	-.0017	.0119	-.0095	-.0002	-.0071
10.59	-.0245	-.0050	.0118	-.0074	.0009	-.0055
12.68	-.0263	-.0070	.0106	-.0056	.0008	-.0053
14.76	-.0011	-.0000	.0116	-.0054	.0009	-.0058
16.80	-.0146	-.0048	.0085	-.0055	.0011	-.0043
18.81	-.0144	-.0041	.0094	-.0060	.0011	-.0048
20.82	-.0184	-.0065	.0110	-.0060	.0016	-.0047
23.90	.0020	.0013	.0105	-.0056	.0012	-.0086
			δ = -10.3			
- 2.08	-.0125	.0025	.0363	-.0155	-.0013	-.0024
.03	-.0167	.0019	.0341	-.0160	-.0012	-.0046
2.15	-.0188	-.0006	.0335	-.0151	-.0007	-.0034
4.27	-.0072	-.0003	.0266	-.0141	-.0002	-.0027
6.39	-.0072	.0008	.0255	-.0109	-.0001	-.0028
8.50	-.0113	-.0005	.0266	-.0175	.0008	-.0045
10.58	-.0444	-.0063	.0231	-.0108	.0016	-.0041
12.69	-.0158	-.0020	.0210	-.0088	.0017	-.0046
14.74	-.0319	-.0062	.0203	-.0085	.0018	-.0047
16.78	-.0444	-.0115	.0194	-.0080	.0018	-.0021
18.79	-.0305	-.0075	.0165	-.0089	.0023	.0001
20.81	-.0232	-.0064	.0153	-.0083	.0023	.0046
23.89	-.0201	-.0068	.0198	-.0076	.0019	.0157
			δ = -15.2			
- 2.07	-.0290	.0054	.0528	-.0192	-.0027	-.0045
.03	-.0393	.0047	.0560	-.0219	-.0027	-.0045
2.16	-.0352	.0023	.0541	-.0210	-.0018	-.0034
4.27	-.0315	.0010	.0465	-.0198	-.0009	-.0034
6.39	-.0316	-.0001	.0430	-.0170	-.0005	-.0051
8.51	-.0228	.0001	.0434	-.0226	.0007	-.0078
10.60	-.0431	-.0036	.0373	-.0151	.0015	-.0072
12.69	-.0356	-.0063	.0387	-.0123	.0017	-.0077
14.75	-.0413	-.0069	.0361	-.0129	.0022	-.0077
16.79	-.0454	-.0078	.0315	-.0129	.0024	-.0054
18.80	-.0372	-.0065	.0305	-.0133	.0030	-.0028
20.83	-.0368	-.0098	.0336	-.0124	.0032	-.0004
23.91	-.0152	-.0016	.0311	-.0124	.0033	.0109
			δ = -31.3			
- 2.07	-.0670	.0189	.0809	-.0322	-.0094	.0088
.04	-.0738	.0183	.0803	-.0337	-.0095	.0081
2.16	-.0812	.0144	.0825	-.0343	-.0081	.0101
4.27	-.0740	.0103	.0756	-.0338	-.0058	.0088
6.38	-.0599	.0058	.0592	-.0262	-.0031	.0050
8.52	-.0364	.0008	.0456	-.0252	.0004	-.0009
10.61	-.0390	-.0008	.0343	-.0159	.0015	-.0025
12.70	-.0342	-.0031	.0354	-.0136	.0016	-.0039
14.75	-.0373	-.0025	.0332	-.0142	.0019	-.0040
16.80	-.0461	-.0055	.0306	-.0144	.0020	-.0014
18.80	-.0446	-.0058	.0305	-.0154	.0027	.0016
20.84	-.0279	-.0008	.0338	-.0154	.0020	.0065
23.91	-.0428	-.0074	.0453	-.0167	.0013	.0168



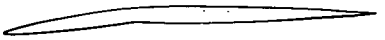


TABLE 12.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.81 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.16	.0168	.0004	-.0039	.0048	-.0001	-.0014
- .02	.0140	.0008	-.0042	.0049	-.0003	.0011
2.10	.0193	.0014	-.0059	.0051	-.0004	.0010
4.22	.0198	.0021	-.0039	.0050	-.0005	.0011
6.36	.0185	.0030	-.0040	.0042	-.0008	.0001
8.47	.0236	.0036	-.0047	.0049	-.0006	.0040
10.58	.0200	.0040	.0466	.0040	-.0010	-.0001
12.66	.0193	.0054	-.0021	.0037	-.0011	-.0004
14.71	.0098	.0035	-.0049	.0033	-.0013	-.0012
16.79	.0182	.0059	-.0022	.0034	-.0016	-.0022
18.83	.0167	.0065	-.0023	.0036	-.0021	-.0032
20.85	.0276	.0103	.0017	.0032	-.0022	-.0017
23.92	.0220	.0097	-.0007	.0021	-.0014	-.0003
			δ = 7.7			
- 2.16	.0326	.0006	-.0181	.0101	-.0002	.0017
- .04	.0337	.0017	-.0265	.0106	-.0007	.0018
2.09	.0416	.0028	-.0302	.0114	-.0012	.0013
4.22	.0368	.0040	-.0236	.0108	-.0014	.0014
6.34	.0380	.0056	-.0237	.0098	-.0018	.0004
8.46	.0338	.0055	-.0252	.0097	-.0014	.0012
10.56	.0301	.0061	.0310	.0083	-.0023	-.0009
12.64	.0251	.0072	-.0150	.0066	-.0023	-.0007
14.71	.0333	.0102	-.0194	.0067	-.0030	-.0027
16.76	.0183	.0065	-.0153	-.0049	.0005	-.0027
18.83	.0182	.0131	.0028	.0045	-.0050	-.0061
20.85	.0426	.0171	-.0082	.0027	-.0028	-.0027
			δ = 13.2			
- 2.16	.0542	.0014	-.0320	.0174	-.0012	-.0005
- .03	.0455	.0034	-.0380	.0177	-.0020	.0006
2.08	.0565	.0058	-.0445	.0192	-.0031	-.0013
4.22	.0673	.0072	-.0367	.0175	-.0034	-.0023
6.34	.0552	.0089	-.0377	.0170	-.0039	-.0028
8.47	.0748	.0118	-.0425	.0179	-.0039	-.0024
10.57	.0559	.0116	.0178	.0144	-.0046	-.0046
12.64	.0211	.0071	-.0203	.0122	-.0050	-.0054
14.71	.0493	.0153	-.0283	.0114	-.0058	-.0068
16.78	.0438	.0158	-.0237	.0107	-.0067	-.0092
18.83	.0277	.0176	-.0043	-.0005	-.0047	-.0113
20.85	.0494	.0215	-.0179	.0086	-.0074	-.0083
23.93	.0424	.0225	-.0205	.0086	-.0078	-.0100
			δ = 28.2			
- 2.17	.1004	.0106	-.0699	.0304	-.0067	-.0118
- .04	.0951	.0150	-.0757	.0306	-.0084	-.0131
2.08	.1024	.0184	-.0773	.0304	-.0099	-.0161
4.21	.1044	.0206	-.0753	.0290	-.0105	-.0175
6.34	.1032	.0236	-.0734	.0282	-.0113	-.0188
8.47	.1305	.0292	-.0826	.0302	-.0121	-.0196
10.57	.0991	.0283	-.0150	.0234	-.0121	-.0207
12.67	.0960	.0312	-.0506	.0221	-.0129	-.0208
14.72	.0917	.0343	-.0529	.0192	-.0136	-.0225
16.77	.0636	.0301	-.0449	.0161	-.0143	-.0251
18.83	.0499	.0335	-.0283	.0057	-.0126	-.0260
20.85	.0810	.0428	-.0411	.0136	-.0151	-.0241
23.91	.0696	.0452	-.0449	.0112	-.0156	-.0255

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.16	-.0255	.0020	.0237	-.0089	-.0008	-.0057
- .02	-.0327	.0013	.0230	-.0093	-.0006	-.0025
2.09	-.0280	.0006	.0263	-.0088	-.0003	-.0014
4.22	-.0228	-.0001	.0235	-.0092	.0004	-.0004
6.35	-.0215	-.0002	.0235	-.0095	.0004	.0002
8.46	-.0096	.0011	.0181	-.0085	.0006	.0003
10.56	-.0146	-.0011	.0621	-.0070	.0010	.0007
12.66	-.0033	.0010	.0163	-.0062	.0014	.0026
14.72	-.0127	-.0016	.0135	-.0068	.0018	.0024
16.77	-.0274	-.0070	.0174	-.0067	.0023	.0034
18.82	-.0169	-.0037	.0131	-.0057	.0027	.0047
20.84	-.0053	-.0009	.0162	-.0055	.0024	.0041
23.90	-.0212	-.0088	.0127	-.0055	.0030	.0036
			δ = -10.3			
- 2.11	.0046	.0009	.0389	-.0149	-.0017	.0157
.00	-.0063	.0023	.	-.0149	-.0014	-.0062
2.13	-.0037	.0011	.0341	-.0148	-.0008	-.0048
4.26	-.0058	-.0006	.0369	-.0144	-.0001	-.0049
6.39	-.0036	-.0006	.0348	-.0145	.0005	-.0032
8.49	-.0047	-.0005	.0239	-.0124	.0012	-.0022
10.58	-.0261	-.0044	.0764	-.0096	.0020	-.0053
12.66	-.0400	-.0082	.0341	-.0103	.0026	-.0045
14.72	-.0394	-.0103	.0281	-.0095	.0030	-.0034
16.78	-.0511	-.0139	.0352	-.0104	.0040	-.0028
18.82	-.0450	-.0121	.0319	-.0102	.0051	-.0007
20.83	-.0278	-.0111	.0190	-.0027	.0036	.0103
23.90	-.0540	-.0215	.0290	-.0064	.0051	.0283
			δ = -15.2			
- 2.13	-.0214	.0040	.0521	-.0207	-.0036	-.0012
.01	-.0313	.0046	.0476	-.0205	-.0024	.0019
2.12	-.0277	.0024	.0476	-.0208	-.0019	.0020
4.26	-.0257	.0003	.0506	-.0207	-.0008	.0038
6.38	-.0274	-.0009	.0459	-.0201	.0001	.0044
8.38	-.0384	.0026	.0382	-.0168	.0011	.0048
10.44	-.0556	.0000	.0060	-.0128	.0020	.0024
12.52	-.0764	-.0100	.0476	-.0141	.0028	.0009
14.57	-.0709	-.0106	.0615	-.0138	.0036	.0023
16.77	-.0607	-.0113	.0435	-.0156	.0050	.0030
18.81	-.0743	-.0163	.0374	-.0148	.0062	.0041
20.82	-.0507	-.0146	.0255	-.0074	.0048	.0135
23.92	-.0506	-.0153	.0347	-.0107	.0060	.0329
			δ = -31.3			
- 2.12	-.0643	.0181	.0860	-.0339	-.0102	.0073
.01	-.0743	.0175	.0802	-.0338	-.0090	.0101
2.13	-.0724	.0154	.0821	-.0349	-.0080	.0099
4.26	-.0690	.0115	.0849	-.0354	-.0065	.0120
6.38	-.0777	.0082	.0804	-.0351	-.0045	.0123
8.50	-.0397	.0085	.0561	-.0284	-.0018	.0100
10.60	-.0414	.0058	.0974	-.0221	.0009	.0053
12.66	-.0673	-.0027	.0561	-.0214	.0021	.0033
14.72	-.0659	-.0081	.0477	-.0200	.0030	.0038
16.79	-.0742	-.0103	.0572	-.0205	.0043	.0046
18.82	-.0662	-.0077	.0460	-.0196	.0063	.0058
20.85	-.0468	-.0078	.0415	-.0127	.0053	.0139
23.91	-.0584	-.0130	.0461	-.0157	.0057	.0320

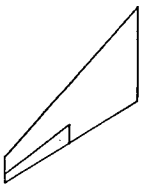
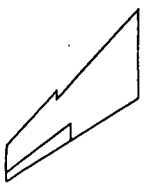


TABLE 13.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.85

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.11	.0095	.0006	-.0118	.0046	-.0003	-.0003
- .00	.0103	.0008	-.0060	.0051	-.0003	.0014
2.13	.0075	.0008	-.0063	.0048	-.0005	.0011
4.25	-.0061	.0003	-.0054	.0043	-.0005	.0007
6.39	-.0098	-.0000	-.0010	.0047	-.0010	-.0006
8.54	.0020	.0039	-.0113	.0018	-.0012	-.0022
10.65	.0092	.0043	-.0136	.0040	-.0013	-.0008
12.71	.0067	.0016	-.0118	.0027	-.0011	-.0005
14.78	.0063	.0028	-.0161	.0020	-.0010	-.0004
16.85	.0089	.0063	-.0208	.0026	-.0016	-.0016
18.88	.0164	.0047	-.0196	.0031	-.0023	-.0028
			δ = 7.7			
- 2.14	.0205	.0009	-.0312	.0106	-.0006	.0001
- .01	.0243	.0019	-.0291	.0111	-.0008	.0025
2.12	.0263	.0024	-.0271	.0105	-.0011	.0021
4.25	.0204	.0028	-.0285	.0103	-.0015	.0008
6.39	.0242	.0038	-.0226	.0095	-.0020	-.0004
8.52	.0288	.0072	-.0295	.0071	-.0026	-.0031
10.63	.0250	.0062	-.0325	.0081	-.0028	-.0022
12.70	.0189	.0053	-.0265	.0072	-.0027	-.0020
14.76	.0053	.0024	-.0308	.0056	-.0028	-.0022
16.83	.0177	.0100	-.0376	.0057	-.0034	-.0032
18.86	.0184	.0062	-.0341	.0062	-.0046	-.0061
			δ = 13.2			
- 2.14	.0453	.0027	-.0506	.0184	-.0020	-.0034
- .02	.0431	.0049	-.0490	.0190	-.0027	-.0021
2.12	.0444	.0055	-.0470	.0174	-.0029	-.0032
4.25	.0475	.0067	-.0497	.0173	-.0035	-.0049
6.38	.0529	.0077	-.0446	.0164	-.0045	-.0070
8.51	.0445	.0117	-.0476	.0120	-.0049	-.0102
10.63	.0431	.0115	-.0428	.0137	-.0054	-.0097
12.69	.0397	.0119	-.0375	.0126	-.0055	-.0096
14.77	.0212	.0090	-.0431	.0101	-.0058	-.0102
16.85	.0551	.0244	-.0491	.0096	-.0065	-.0121
18.85	.0114	.0063	-.0397	.0095	-.0080	-.0147
			δ = 28.2			
- 2.14	.0883	.0141	-.0800	.0315	-.0083	-.0154
- .02	.0925	.0174	-.0804	.0305	-.0096	-.0168
2.11	.0931	.0190	-.0800	.0293	-.0103	-.0192
4.24	.0909	.0212	-.0817	.0289	-.0112	-.0221
6.38	.0982	.0243	-.0752	.0272	-.0124	-.0245
8.52	.0864	.0272	-.0717	.0229	-.0126	-.0262
10.63	.0746	.0256	-.0660	.0245	-.0131	-.0258
12.70	.0670	.0230	-.0571	.0214	-.0134	-.0259
14.79	.0672	.0305	-.0670	.0183	-.0142	-.0287
16.85	.0623	.0347	-.0645	.0161	-.0146	-.0298
18.89	.0717	.0366	-.0630	.0151	-.0168	-.0343

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.12	-.0406	.0025	.0168	-.0095	-.0009	-.0054
- .00	-.0368	.0015	.0191	-.0100	-.0006	-.0034
2.13	-.0316	.0006	.0178	-.0093	-.0005	-.0035
4.26	-.0311	-.0005	.0171	-.0087	-.0003	-.0041
6.40	-.0230	-.0007	.0131	-.0069	-.0002	-.0043
8.53	-.0247	-.0002	.0059	-.0089	.0001	-.0053
10.63	-.0403	-.0057	.0065	-.0068	.0008	-.0034
12.71	-.0203	-.0030	.0040	-.0068	.0010	-.0031
14.78	-.0252	-.0055	-.0035	-.0062	.0010	-.0031
16.84	-.0173	-.0009	-.0076	-.0059	.0009	-.0040
18.88	-.0157	-.0090	-.0010	-.0059	.0009	-.0039
			δ = -10.3			
- 2.08	-.0178	.0035	.0328	-.0160	-.0016	-.0038
.04	-.0219	.0026	.0344	-.0170	-.0013	-.0043
2.16	-.0155	.0003	.0305	-.0158	-.0008	-.0034
4.29	-.0047	.0002	.0238	-.0142	-.0003	-.0028
6.42	-.0005	.0018	.0230	-.0122	-.0007	-.0043
8.53	-.0416	-.0009	.0270	-.0162	.0003	-.0057
10.61	-.0618	-.0075	.0197	-.0122	.0015	-.0037
12.71	-.0211	-.0022	.0132	-.0095	.0013	-.0045
14.77	-.0360	-.0063	.0044	-.0093	.0014	-.0032
16.83	-.0289	-.0017	.0007	-.0087	.0013	-.0028
18.86	-.0403	-.0111	.0038	-.0090	.0017	-.0004
20.87	-.0414	-.0131	.0190	-.0091	.0024	.0048
			δ = -15.2			
- 2.06	-.0199	.0066	.0453	-.0202	-.0031	-.0026
.06	-.0238	.0057	.0504	-.0227	-.0030	-.0033
2.18	-.0175	.0029	.0446	-.0208	-.0019	-.0020
4.31	-.0083	.0027	.0373	-.0196	-.0010	-.0045
6.43	-.0162	.0035	.0385	-.0160	-.0005	-.0043
8.55	-.0451	.0017	.0398	-.0210	-.0000	-.0071
10.64	-.0522	-.0020	.0308	-.0189	.0014	-.0046
12.70	-.0461	-.0064	.0277	-.0132	.0012	-.0059
14.78	-.0607	-.0103	.0219	-.0136	.0014	-.0054
16.82	-.0564	-.0076	.0191	-.0134	.0017	-.0054
18.86	-.0608	-.0145	.0193	-.0135	.0023	-.0024
20.88	-.0422	-.0096	.0303	-.0134	.0032	.0009
			δ = -31.3			
- 2.07	-.0714	.0210	.0756	-.0317	-.0100	.0088
.05	-.0736	.0201	.0793	-.0337	-.0099	.0090
2.17	-.0725	.0160	.0774	-.0340	-.0084	.0107
4.30	-.0708	.0118	.0700	-.0325	-.0060	.0087
6.42	-.0536	.0075	.0550	-.0247	-.0034	.0042
8.55	-.0434	.0041	.0417	-.0224	-.0003	-.0020
10.64	-.0441	.0001	.0238	-.0159	.0013	-.0044
12.72	-.0228	.0011	.0208	-.0117	.0009	-.0036
14.79	-.0489	-.0055	.0166	-.0122	.0012	-.0032
16.84	-.0461	-.0030	.0140	-.0122	.0013	-.0033
18.87	.0406	-.0059	.0154	-.0127	.0012	.0002
20.90	-.0462	-.0082	.0331	-.0137	.0015	.0057



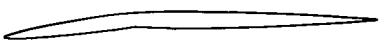
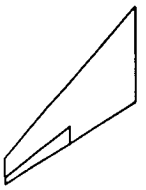


TABLE 13.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.85 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.16	.0202	.0001	-.0042	.0042	-.0001	.0020
- .03	.0163	.0007	-.0037	.0044	-.0002	.0014
2.12	.0231	.0015	-.0032	.0052	-.0004	.0014
4.25	.0223	.0021	-.0083	.0067	-.0008	.0010
6.40	.0236	.0033	-.0082	.0046	-.0007	-.0001
8.52	.0384	.0078	-.0138	.0053	-.0008	.0002
10.61	.0140	.0034	-.0034	.0043	-.0011	-.0004
12.67	.0060	.0005	.0027	.0042	-.0011	.0001
14.76	.0191	.0056	.0009	.0038	-.0015	-.0009
16.84	.0232	.0087	.0013	.0032	-.0016	-.0012
18.89	.0259	.0095	-.0042	.0030	-.0019	-.0019
20.93	.0334	.0124	-.0017	.0027	-.0021	-.0023
			δ = 7.7			
- 2.18	.0287	.0008	-.0220	.0095	-.0003	.0041
- .04	.0348	.0017	-.0267	.0103	-.0007	.0021
2.09	.0396	.0031	-.0285	.0111	-.0011	.0019
4.11	.0433	.0046		.0112	-.0015	.0012
6.37	.0349	.0055	-.0285	.0102	-.0018	-.0002
8.50	.0579	.0121	-.0376	.0097	-.0021	-.0007
10.59	.0313	.0070	-.0195	.0081	-.0023	-.0014
12.67	.0253	.0059	-.0143	.0086	-.0028	-.0016
14.74	.0199	.0064	-.0099	.0072	-.0032	-.0025
16.79	.0058	.0027	-.0110	.0069	-.0035	-.0025
18.88	.0346	.0133	-.0141	.0062	-.0041	-.0043
20.91	.0403	.0167	-.0148	.0055	-.0043	-.0050
			δ = 13.2			
- 2.18	.0461	.0022	-.0354	.0167	-.0014	.0024
- .04	.0555	.0037	-.0369	.0173	-.0021	-.0011
2.09	.0605	.0063	-.0417	.0187	-.0033	-.0014
4.25	.0678	.0077	-.0395	.0171	-.0036	-.0033
6.38	.0596	.0092	-.0423	.0167	-.0039	-.0040
8.49	.0633	.0126	-.0422	.0161	-.0042	-.0043
10.61	.0551	.0144	-.0304	.0111	-.0049	-.0074
12.67	.0480	.0120	-.0243	.0136	-.0056	-.0070
14.77	.0546	.0165	-.0189	.0123	-.0063	-.0077
16.82	.0168	.0132	-.0052	-.0007	-.0048	-.0101
18.89	.0580	.0228	-.0221	.0098	-.0073	-.0100
20.91	.0532	.0236	-.0235	.0087	-.0076	-.0113
			δ = 28.2			
- 2.18	.0937	.0116	-.0710	.0293	-.0071	-.0091
- .05	.0980	.0152	-.0748	.0297	-.0086	-.0136
2.09	.1009	.0193	-.0757	.0298	-.0104	-.0170
4.23	.1042	.0213	-.0757	.0284	-.0110	-.0197
6.38	.1103	.0247	-.0802	.0284	-.0115	-.0202
8.48	.0968	.0283	-.0804	.0262	-.0128	-.0232
10.60	.1041	.0327	-.0626	.0251	-.0138	-.0241
12.69	.0921	.0327	-.0461	.0187	-.0140	-.0246
14.77	.0888	.0376	-.0432	.0146	-.0139	-.0258
16.81	.0517	.0324	-.0315	.0065	-.0129	-.0269
18.88	.0897	.0426	-.0533	.0154	-.0152	-.0263

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.19	-.0281	.0020	.0145	-.0091	-.0009	-.0024
- .04	-.0283	.0014	.0220	-.0099	-.0003	-.0018
2.11	-.0251	.0006	.0250	-.0096	-.0003	-.0009
4.26	-.0120	.0003	.0209	-.0096	-.0000	-.0005
6.39	-.0098	.0009	.0161	-.0094	.0004	.0006
8.50	-.0259	-.0005	.0195	-.0111	.0011	.0018
10.59	-.0073	.0011	.0073	-.0074	.0012	.0021
12.67	-.0170	-.0028	.0170	-.0050	.0010	.0030
14.75	-.0114	-.0006	.0195	-.0076	.0019	.0032
16.82	-.0169	-.0027	.0219	-.0076	.0025	.0045
			δ = -10.3			
- 2.12	.0055	.0008	.0356	-.0153	-.0022	-.0045
- .00	.0017	.0022	.0354	-.0151	-.0014	-.0058
2.15	.0055	.0012	.0356	-.0153	-.0008	-.0043
4.29	.0032	-.0003	.0351	-.0151	-.0001	-.0038
8.52	-.0171	.0011	.0273	-.0120	.0016	-.0030
10.61	-.0281	-.0034	.0318	-.0106	.0021	-.0046
12.68	-.0293	-.0046	.0340	-.0116	.0030	-.0039
14.77	-.0312	-.0063	.0349	-.0105	.0032	-.0037
16.84	-.0365	-.0082	.0370	-.0106	.0039	-.0022
18.88	.0043	-.0047	.0014	-.0109	.0051	.0009
20.88	-.0514	-.0148	.0233	-.0095	.0058	.0113
			δ = -15.2			
- 2.13	-.0141	.0037	.0485	-.0206	-.0037	.0009
.01	-.0203	.0045	.0473	-.0203	-.0026	.0018
2.15	-.0215	.0027	.0487	-.0208	-.0020	.0021
4.28	-.0320	-.0002	.0498	-.0205	-.0009	.0026
6.42	-.0193	.0001	.0400	-.0203	-.0000	.0039
8.52	-.0413	-.0019	.0422	-.0162	.0012	.0031
10.61	-.0410	-.0024	.0398	-.0145	.0020	.0010
12.69	-.0482	-.0083	.0467	-.0155	.0029	.0008
14.77	-.0503	-.0082	.0462	-.0147	.0032	.0010
16.82	-.0682	-.0146	.0505	-.0155	.0044	.0029
18.87	-.0250	-.0056	.0268	-.0055	.0024	.0043
			δ = -31.3			
- 2.12	-.0557	.0180	.0820	-.0333	-.0105	.0094
.02	-.0603	.0179	.0809	-.0331	-.0092	.0105
2.16	-.0647	.0155	.0839	-.0341	-.0082	.0106
4.30	-.0681	.0116	.0841	-.0350	-.0067	.0115
6.42	-.0707	.0081	.0734	-.0334	-.0046	.0105
8.52	-.0777	.0035	.0643	-.0262	-.0015	.0079
10.62	-.0571	.0005	.0543	-.0194	.0010	.0036
12.70	-.0455	-.0028	.0525	-.0175	.0022	.0023
14.76	-.0565	-.0056	.0501	-.0163	.0027	.0026
16.83	-.0629	-.0075	.0556	-.0181	.0036	.0036
18.90	-.0143	.0032	.0310	-.0084	.0020	.0063
20.89	-.0564	-.0092	.0339	-.0133	.0056	.0135



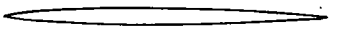
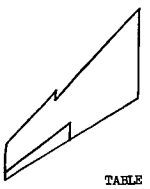


TABLE 14.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2}$ = 0.50; M = 0.90

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.12	.0080	.0023	-.0085	.0049	-.0002	-.0003
- .00	.0123	.0029	-.0099	.0049	-.0004	.0005
2.14	.0082	.0028	-.0086	.0047	-.0006	.0002
4.29	.0153	.0037	-.0107	.0043	-.0007	-.0002
6.42	.0093	.0027	-.0023	.0038	-.0012	-.0007
8.54	.0142	.0063	-.0082	.0042	-.0012	-.0010
10.65	.0135	.0056	-.0154	.0029	-.0013	-.0023
12.74	.0114	.0054	-.0083	.0038	-.0016	-.0022
14.82	-.0084	.0023	.0033	.0023	-.0014	-.0024
			δ = 7.7			
- 2.14	.0241	.0011	-.0281	.0107	-.0005	.0005
- .01	.0273	.0023	-.0306	.0112	-.0010	.0023
2.14	.0302	.0027	-.0286	.0107	-.0013	.0012
4.27	.0388	.0055	-.0423	.0097	-.0015	.0005
6.40	.0316	.0055	-.0313	.0086	-.0025	-.0015
8.52	.0046	-.0003	-.0181	.0092	-.0023	-.0017
10.65	.0275	.0067	-.0280	.0071	-.0031	-.0033
12.74	.0267	.0071	-.0208	.0084	-.0034	-.0042
14.80	.0160	.0630	-.0142	.0059	-.0032	-.0042
			δ = 13.2			
- 2.14	.0499	.0031	-.0489	.0180	-.0019	-.0034
- .01	.0466	.0055	-.0474	.0182	-.0030	-.0032
2.12	.0395	.0059	-.0445	.0170	-.0033	-.0051
4.26	.0459	.0074	-.0530	.0162	-.0036	-.0062
6.40	.0404	.0076	-.0401	.0144	-.0048	-.0093
8.53	.0403	.0102	-.0383	.0145	-.0050	-.0100
10.64	.0322	.0088	-.0343	.0127	-.0056	-.0112
12.74	.0639	.0176	-.0471	.0144	-.0069	-.0132
14.82	.0464	.0132	-.0275	.0102	-.0063	-.0132
			δ = 28.2			
- 2.17	.0837	.0144	-.0798	.0310	-.0083	-.0150
- .03	.0893	.0182	-.0809	.0296	-.0100	-.0181
2.11	.0829	.0197	-.0767	.0280	-.0108	-.0210
4.26	.0923	.0223	-.0890	.0275	-.0113	-.0234
6.40	.0850	.0258	-.0741	.0243	-.0136	-.0289
8.53	.0731	.0247	-.0623	.0238	-.0127	-.0281
10.65	.0831	.0302	-.0713	.0198	-.0137	-.0303
12.73	.0811	.0297	-.0653	.0251	-.0152	-.0310
14.84	.1072	.0388	-.0538	.0188	-.0157	-.0358

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.13	-.0346	.0026	.0223	-.0089	-.0007	-.0054
.01	-.0316	.0017	.0209	-.0099	-.0007	-.0044
2.14	-.0367	-.0000	.0198	-.0088	-.0006	-.0042
4.30	-.0244	.0003	.0121	-.0090	-.0004	-.0044
6.42	-.0099	.0012	.0071	-.0072	-.0003	-.0037
8.55	-.0253	-.0030	.0212	-.0074	.0004	-.0032
10.66	-.0276	-.0030	.0210	-.0101	.0006	-.0041
12.73	-.0309	-.0054	.0117	-.0068	.0009	-.0037
14.82	-.0203	-.0069	.0200	-.0068	.0011	-.0029
			δ = -10.3			
- 2.09	-.0160	.0048	.0368	-.0153	-.0019	-.0044
.05	-.0091	.0034	.0315	-.0164	-.0017	-.0046
2.18	-.0058	.0008	.0285	-.0150	-.0011	-.0040
4.32	-.0030	.0012	.0200	-.0140	-.0006	-.0043
6.45	-.0117	.0010	.0256	-.0120	-.0004	-.0040
8.57	-.0242	-.0008	.0313	-.0110	.0007	-.0038
10.68	-.0344	-.0026	.0355	-.0173	.0012	-.0057
12.74	-.0506	-.0141	.0302	-.0111	.0014	-.0056
14.81	-.0201	-.0045	.0234	-.0090	.0011	-.0048
			δ = -15.2			
- 2.08	-.0118	.0070	.0434	-.0256	-.0033	-.0024
.06	-.0166	.0063	.0437	-.0213	-.0033	-.0018
2.20	-.0092	.0032	.0388	-.0196	-.0022	-.0016
4.33	-.0009	.0035	.0257	-.0184	-.0014	-.0020
6.46	-.0135	.0040	.0370	-.0171	-.0009	-.0027
8.58	-.0258	.0022	.0419	-.0161	.0002	-.0033
10.68	-.0416	-.0014	.0424	-.0202	.0009	-.0054
12.74	-.0535	-.0054	.0321	-.0140	.0008	-.0050
14.83	-.0187	-.0014	.0277	-.0125	.0006	-.0046
			δ = -31.3			
- 2.07	-.0546	.0214	.0744	-.0298	-.0102	.0076
.07	-.0601	.0206	.0750	-.0320	-.0101	.0088
2.20	-.0594	.0165	.0754	-.0328	-.0085	.0099
4.33	-.0558	.0195	.0611	-.0312	-.0067	.0071
6.46	-.0358	.0098	.0511	-.0241	-.0030	.0023
8.59	-.0572	-.0002	.0616	-.0195	-.0006	-.0008
10.68	-.0224	.0008	.0338	-.0172	.0013	-.0048
12.74	-.0447	-.0039	.0249	-.0107	.0011	-.0048
14.83	-.0308	-.0046	.0329	-.0102	.0007	-.0052



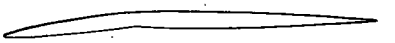
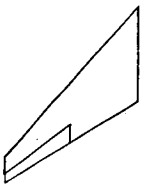


TABLE 14.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2}$ = 0.50; M = 0.90 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.17	.0191	-.0000	-.0077	.0047	-.0001	.0015
- .03	.0184	.0008	-.0032	.0048	-.0002	.0014
2.12	.0160	.0012	-.0017	.0051	-.0003	.0010
4.26	.0226	.0023	-.0093	.0046	-.0005	.0008
6.39	.0160	.0026	-.0045	.0041	-.0007	.0009
8.50	.0238	.0063	-.0139	.0044	-.0010	-.0000
10.61	.0253	.0093	-.0046	.0036	-.0010	-.0005
12.78	.0274	.0076		-.0010	-.0017	-.0022
14.82	.0189	.0094	.0057	.0029	-.0014	-.0012
			δ = 7.7			
- 2.20	.0240	.0013	-.0255	.0098	-.0003	.0041
- .05	.0285	.0021	-.0254	.0100	-.0007	.0017
2.10	.0386	.0034	-.0296	.0109	-.0011	.0004
4.24	.0385	.0051	-.0298	.0102	-.0017	-.0003
6.38	.0354	.0069	-.0259	.0087	-.0020	-.0011
8.49	.0386	.0104	-.0323	.0080	-.0024	-.0024
10.61	.0438	.0152	-.0162	.0061	-.0030	-.0039
12.71	.0535	.0153	-.0110	.0041	-.0033	-.0050
14.80	.0185	.0095	-.0046	.0040	-.0026	-.0042
			δ = 13.2			
- 2.20	.0420	.0028	-.0352	.0157	-.0015	.0019
- .04	.0494	.0044	-.0376	.0166	-.0023	-.0001
2.10	.0499	.0061	-.0380	.0172	-.0033	-.0029
4.24	.0549	.0089	-.0443	.0167	-.0039	-.0042
6.37	.0447	.0076	-.0372	.0146	-.0042	-.0050
8.49	.0508	.0135	-.0407	.0131	-.0051	-.0078
10.61	.0715	.0215	-.0325	.0153	-.0060	-.0090
12.72	.0670	.0199	-.0192	.0102	-.0064	-.0099
14.81	.0501	.0194	-.0186	.0074	-.0052	-.0093
			δ = 28.2			
- 2.21	.0773	.0127	-.0676	.0279	-.0073	-.0096
- .06	.0872	.0164	-.0725	.0287	-.0091	-.0146
2.09	.0899	.0192	-.0718	.0284	-.0107	-.0190
4.23	.0981	.0224	-.0776	.0275	-.0112	-.0203
6.36	.0866	.0240	-.0742	.0259	-.0117	-.0212
8.48	.0869	.0278	-.0698	.0230	-.0128	-.0244
10.59	.0985	.0323	-.0623	.0242	-.0137	-.0251
12.70	.1106	.0374	-.0613	.0209	-.0145	-.0266
14.80	.0840	.0365	-.0450	.0155	-.0135	-.0264

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.18	-.0338	.0027	.0266	-.0086	-.0008	-.0024
- .03	-.0246	.0017	.0254	-.0096	-.0006	-.0019
2.12	-.0207	.0007	.0254	-.0095	-.0003	-.0014
4.26	-.0146	.0017	.0194	-.0093	-.0000	-.0003
6.40	-.0191	-.0009	.0206	-.0085	.0004	.0008
8.50	-.0187	-.0012	.0187	-.0068	.0013	.0030
10.60	-.0066	.0052	.0153	-.0072	.0012	.0026
12.72	.0065	.0052	.0225	-.0099	.0006	.0008
14.80	-.0081	-.0000	.0151	-.0065	.0023	.0047
			δ = -10.3			
- 2.13	.0154	-.0000	.0304	-.0147	-.0023	-.0045
.02	.0087	.0084	.0344	-.0148	-.0014	-.0051
4.30	.0068	.0013	.0304	-.0147	-.0001	-.0048
6.43	.0001	-.0002	.0279	-.0131	.0007	-.0038
8.52	-.0536	-.0090	.0530	-.0125	.0019	-.0043
10.64	-.0205	-.0017	.0418	-.0109	.0020	-.0050
12.70	-.0419	-.0079	.0420	-.0105	.0023	-.0049
14.79	-.0592	-.0148	.0358	-.0106	.0036	-.0032
			δ = -15.2			
- 2.12	-.0068	.0034	.0466	-.0196	-.0037	.0002
.01	-.0158	.0049	.0454	-.0193	-.0028	.0011
2.16	-.0150	.0030	.0475	-.0204	-.0021	.0010
4.31	-.0223	.0004	.0519	-.0202	-.0010	.0021
6.43	-.0126	.0004	.0371	-.0185	.0003	.0023
8.53	-.0509	-.0025	.0599	-.0155	.0018	.0027
10.62	-.0289	.0020	.0436	-.0147	.0018	.0002
12.70	-.0534	-.0048	.0517	-.0145	.0017	.0001
14.81	-.0608	-.0093	.0471	-.0152	.0033	.0019
			δ = -31.3			
- 2.11	-.0437	.0183	.0798	-.0309	-.0107	.0098
.02	-.0530	.0183	.0787	-.0313	-.0094	.0103
2.17	-.0567	.0184	.0827	-.0335	-.0083	.0100
4.32	-.0606	.0118	.0830	-.0340	-.0064	.0104
6.44	-.0579	.0065	.0740	-.0316	-.0037	.0083
8.54	-.0737	-.0016	.0742	-.0215	-.0002	.0045
10.63	-.0315	.0038	.0466	-.0162	.0009	.0023
12.71	-.0316	.0010	.0446	-.0128	.0014	.0014
14.80	-.0659	-.0062	.0466	-.0144	.0032	.0019



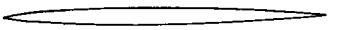
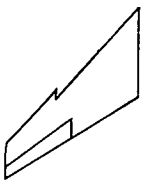


TABLE 15.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_i}{b/2} = 0.50$; M = 0.94

(a) Plain leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.14	.0051	.0027	-.0083	.0046	-.0003	-.0006
- .00	.0093	.0031	-.0071	.0049	-.0004	.0004
2.13	.0089	.0038	-.0098	.0048	-.0006	.0003
4.27	.0119	.0032	-.0044	.0040	-.0007	-.0004
6.39	.0097	.0046	-.0123	.0037	-.0011	-.0012
8.54	.0167	.0062	-.0048	.0033	-.0010	-.0009
10.62	.0171	.0059	-.0203	.0036	-.0014	-.0020
			δ = 7.7			
- 2.15	.0205	.0021	-.0271	.0105	-.0006	.0012
- .01	.0266	.0030	-.0259	.0108	-.0011	.0017
2.12	.0208	.0045	-.0290	.0099	-.0015	.0005
4.26	.0277	.0023	-.0251	.0085	-.0016	-.0000
6.39	.0197	.0050	-.0248	.0078	-.0023	-.0021
8.48	.0451	.0106		.0071	-.0028	-.0031
10.62	-.0027	.0009	-.0050	.0073	-.0030	-.0042
			δ = 13.2			
- 2.16	.0397	.0036	-.0458	.0170	-.0020	-.0032
- .02	.0420	.0056	-.0466	.0172	-.0031	-.0043
2.11	.0420	.0064	-.0476	.0164	-.0035	-.0055
4.25	.0435	.0070	-.0424	.0144	-.0038	-.0067
6.38	.0343	.0102	-.0397	.0128	-.0049	-.0099
8.50	.0496	.0126	-.0550	.0125	-.0053	-.0110
10.60	.0695	.0187	-.0735	.0130	-.0070	-.0145
			δ = 28.2			
- 2.17	.0823	.0147	-.0774	.0298	-.0085	-.0151
- .03	.0834	.0182	-.0778	.0286	-.0101	-.0188
2.10	.0833	.0205	-.0799	.0273	-.0110	-.0221
4.24	.0766	.0208	-.0714	.0243	-.0111	-.0235
6.38	.0685	.0226	-.0657	.0221	-.0129	-.0289
8.51	.0996	.0330	-.0880	.0194	-.0142	-.0327
10.60	.0633	.0272	-.0673	.0188	-.0150	-.0339

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.13	-.0301	.0033	.0206	-.0090	-.0008	-.0043
.01	-.0302	.0026	.0218	-.0098	-.0007	-.0037
2.15	-.0250	.0023	.0174	-.0086	-.0005	-.0039
4.27	-.0264	.0007	.0150	-.0078	-.0001	-.0030
6.41	-.0170	-.0011	.0126	-.0067	.0002	-.0027
8.52	-.0088	.0022	-.0012	-.0078	.0005	-.0025
10.64	-.0394	-.0058	.0284	-.0079	.0007	-.0026
			δ = -10.3			
- 2.08	-.0057	.0038	.0347	-.0154	-.0020	-.0055
.05	-.0045	.0035	.0302	-.0158	-.0017	-.0045
2.18	-.0030	.0015	.0266	-.0137	-.0011	-.0038
4.31	.0028	-.0012	.0264	-.0129	-.0005	-.0040
6.44	-.0108	-.0001	.0273	-.0119	-.0000	-.0041
8.55	-.0091	.0041	.0178	-.0117	.0003	-.0040
10.67	-.0451	-.0050	.0514	-.0111	.0007	-.0049
			δ = -15.2			
- 2.07	-.0058	.0085	.0440	-.0199	-.0039	-.0022
.06	-.0024	.0082	.0359	-.0203	-.0033	-.0010
2.18	-.0040	.0063	.0296	-.0167	-.0021	-.0002
4.31	.0039	.0024	.0269	-.0163	-.0011	-.0028
6.44	-.0047	.0053	.0216	-.0126	-.0003	-.0020
8.54	-.0032	.0071	.0100	-.0146	-.0002	-.0030
10.66	-.0148	.0043	.0229	-.0164	.0005	-.0033
			δ = -31.3			
- 2.06	-.0486	.0212	.0726	-.0293	-.0106	.0083
.07	-.0504	.0207	.0721	-.0310	-.0101	.0097
2.20	-.0505	.0182	.0689	-.0303	-.0083	.0089
4.33	-.0395	.0121	.0655	-.0294	-.0063	.0052
6.45	-.0300	.0083	.0481	-.0212	-.0025	-.0007
8.57	-.0135	.0096	.0327	-.0166	-.0010	-.0029
10.69	-.0468	.0006	.0625	-.0142	-.0003	-.0049



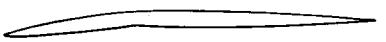


TABLE 15.- INCREMENTAL AERODYNAMIC COEFFICIENTS. $\frac{y_1}{b/2}$ = 0.50; M = 0.94 - Concluded

(b) Modified leading edge

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = 3.3			
- 2.19	.0178	.0020	-.0013	.0055	.0001	.0027
- .03	.0134	.0015	-.0034	.0042	-.0002	.0017
2.10	.0164	.0019	-.0050	.0047	-.0003	.0012
4.24	.0151	.0030	-.0078	.0048	-.0006	.0008
6.37	.0196	.0030	-.0049	.0041	-.0009	-.0007
8.47	.0186	.0068	-.0145	.0039	-.0011	-.0009
10.58	.0530	.0128	-.0430	.0031	-.0014	-.0013
			δ = 7.7			
- 2.19	.0272	.0027	-.0179	.0089	-.0003	.0036
- .05	.0235	.0035	-.0230	.0097	-.0008	.0017
2.07	.0223	.0055	-.0252	.0096	-.0013	.0001
4.22	.0254	.0047	-.0255	.0090	-.0017	-.0007
6.34	.0245	.0112	-.0285	.0073	-.0021	-.0022
8.46	.0252	.0086	-.0245	.0072	-.0026	-.0031
10.57	.0608	.0157	-.0541	.0066	-.0032	-.0044
			δ = 13.2			
- 2.20	.0377	.0046	-.0304	.0143	-.0016	.0019
- .06	.0407	.0042	-.0367	.0157	-.0026	-.0004
2.08	.0409	.0072	-.0396	.0164	-.0035	-.0032
4.22	.0405	.0093	-.0375	.0144	-.0040	-.0048
6.34	.0341	.0133	-.0382	.0131	-.0045	-.0066
8.44	.0374	.0153	-.0426	.0120	-.0054	-.0093
10.57	.0726	.0201	-.0661	.0120	-.0067	-.0112
			δ = 28.2			
- 2.21	.0731	.0146	-.0588	.0256	-.0072	-.0094
- .07	.0773	.0175	-.0692	.0279	-.0092	-.0142
2.07	.0913	.0189	-.0788	.0279	-.0105	-.0186
4.20	.0717	.0218	-.0701	.0237	-.0106	-.0192
6.33	.0718	.0244	-.0659	.0218	-.0112	-.0216
8.44	.0693	.0285	-.0654	.0191	-.0129	-.0270
10.55	.1068	.0389	-.0982	.0170	-.0150	-.0308

α, deg	ΔC_L	ΔC_D	ΔC_m	ΔC_l	ΔC_n	ΔC_Y
			δ = -6.6			
- 2.18	-.0174	.0027	.0250	-.0083	-.0007	-.0011
- .03	-.0237	.0014	.0226	-.0091	-.0005	-.0016
2.11	-.0254	.0019	.0240	-.0084	-.0002	-.0010
4.25	-.0207	.0014	.0197	-.0083	.0002	.0006
6.36	-.0151	.0012	.0113	-.0074	.0007	.0021
8.49	-.0103	.0016	.0132	-.0071	.0011	.0028
10.59	.0245	.0076	-.0162	-.0078	.0012	.0040
			δ = -10.3			
- 2.11	.0238	.0025	.0351	-.0136	-.0020	-.0050
.02	.0150	.0026	.0283	-.0142	-.0016	-.0054
2.15	.0159	.0036	.0261	-.0133	-.0008	-.0049
4.29	.0142	.0023	.0246	-.0131	.0001	-.0043
6.40	.0046	.0029	.0210	-.0114	.0010	-.0050
8.53	-.0029	-.0021	.0387	-.0123	.0017	-.0046
10.63	-.0186	-.0001	.0342	-.0128	.0016	-.0043
			δ = -15.2			
- 2.12	.0022	.0036	.0464	-.0094	-.0036	.0011
.01	-.0039	.0043	.0412	-.0092	-.0035	.0014
2.16	.0034	.0048	.0390	-.0085	-.0030	.0017
4.29	-.0009	.0048	.0320	-.0079	-.0020	.0020
6.40	.0026	.0054	.0221	-.0064	-.0005	.0009
8.52	-.0107	-.0000	.0372	-.0062	-.0004	.0006
10.64	-.0186	.0025	.0394	-.0069	-.0008	-.0003
			δ = -31.3			
- 2.11	-.0374	.0176	.0789	-.0305	-.0105	.0100
.02	-.0423	.0170	.0760	-.0306	-.0095	.0103
2.18	-.0382	.0171	.0734	-.0313	-.0081	.0097
4.30	-.0417	.0143	.0678	-.0307	-.0056	.0080
6.42	-.0322	.0085	.0604	-.0270	-.0029	.0050
8.55	-.0279	.0020	.0604	-.0204	-.0004	.0030
10.64	-.0201	.0033	.0392	-.0150	.0010	.0010

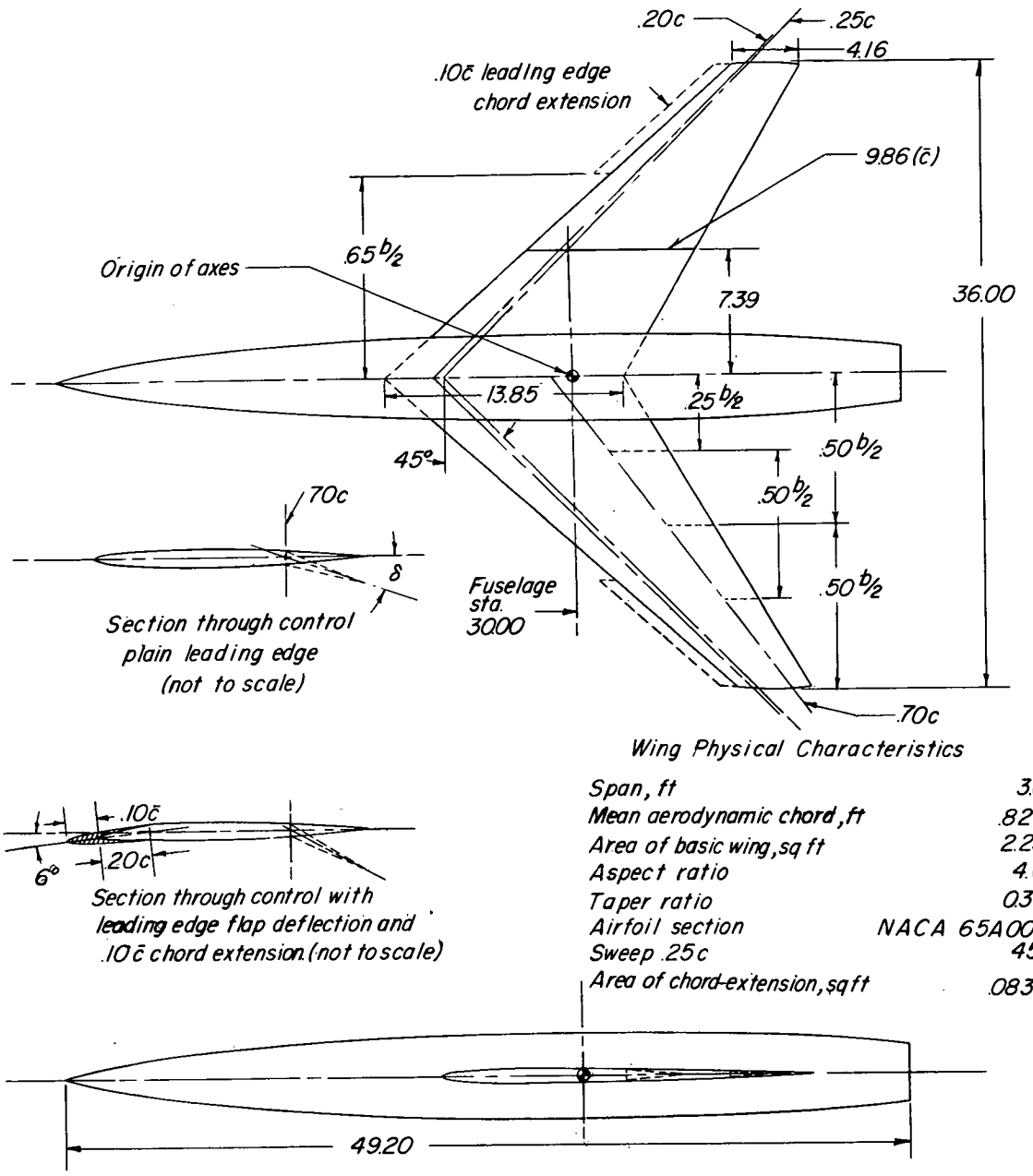


Figure 1.- General arrangement of model and controls. All dimensions are in inches unless otherwise noted.

Figure 2.- Photograph of the model mounted in the Langley high-speed 7- by 10-foot tunnel. L-74562

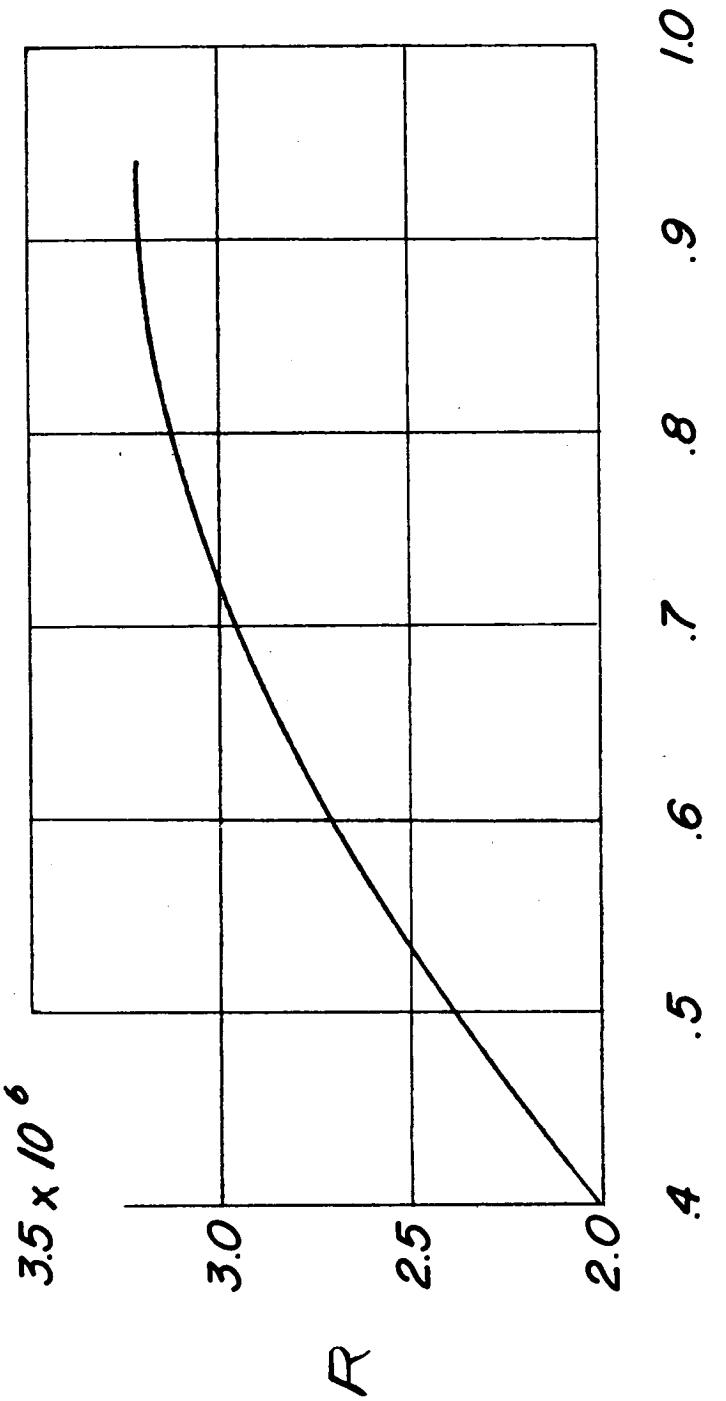


Figure 3.- Variation of average test Reynolds number with Mach number.

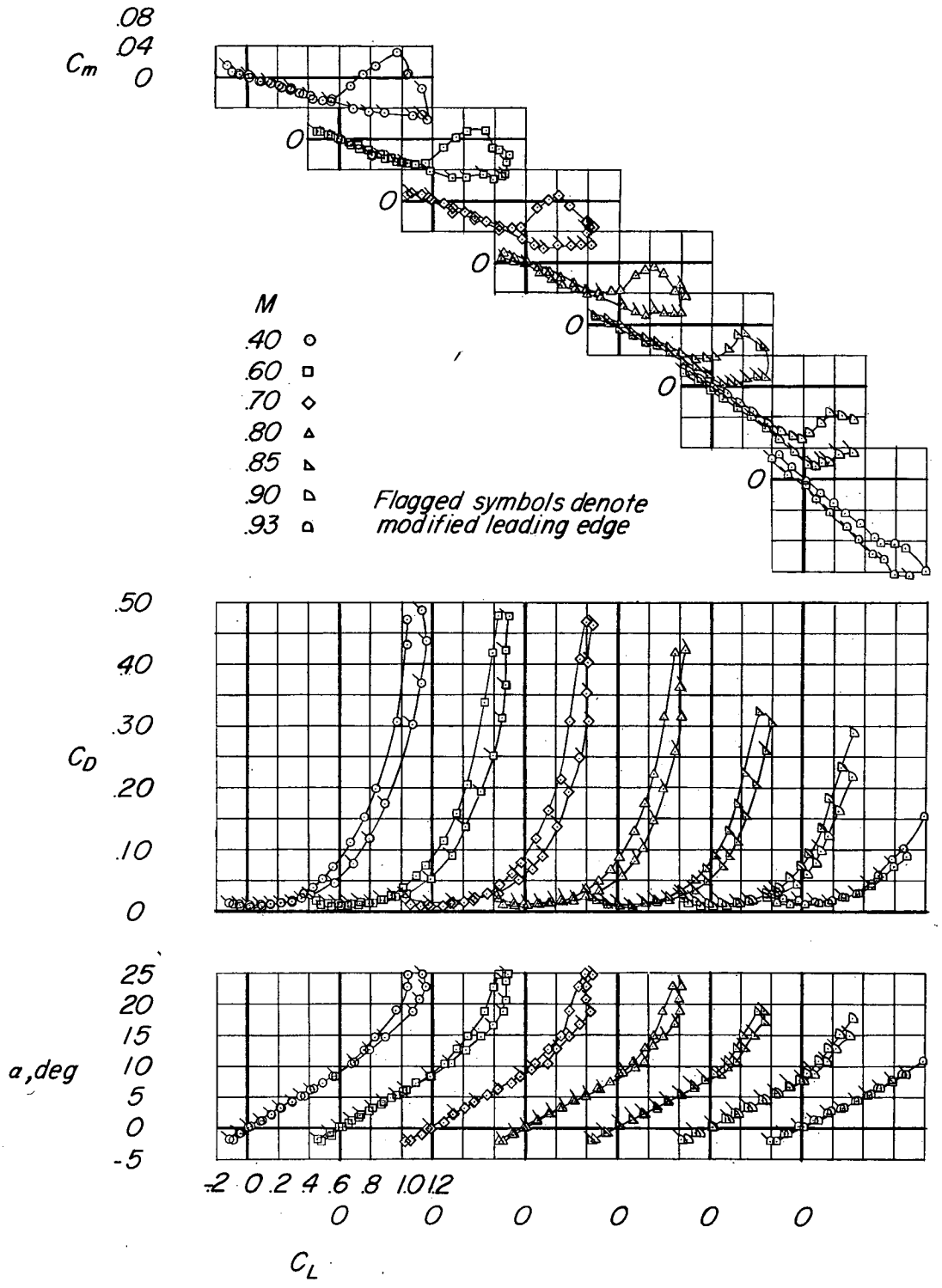
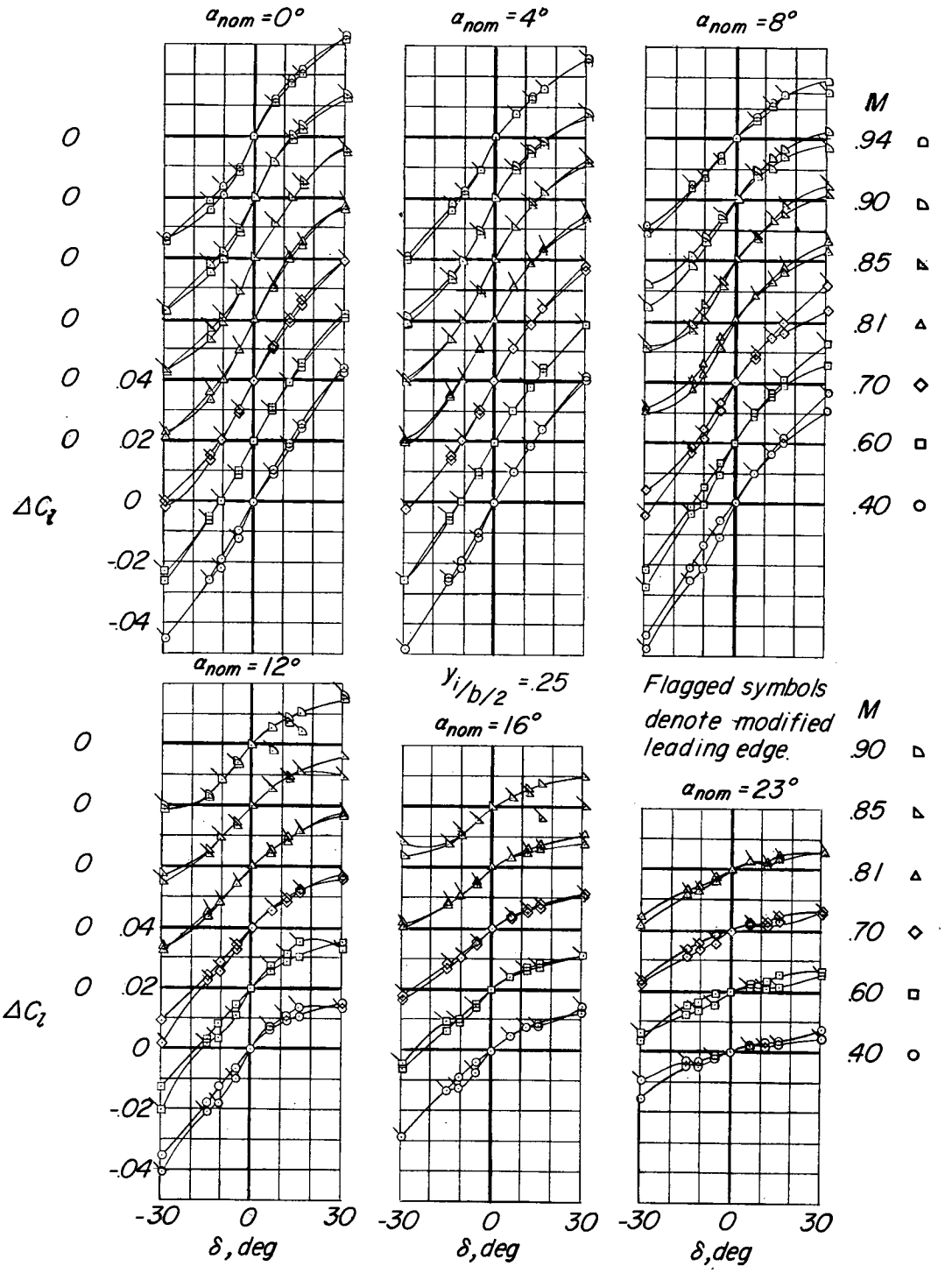
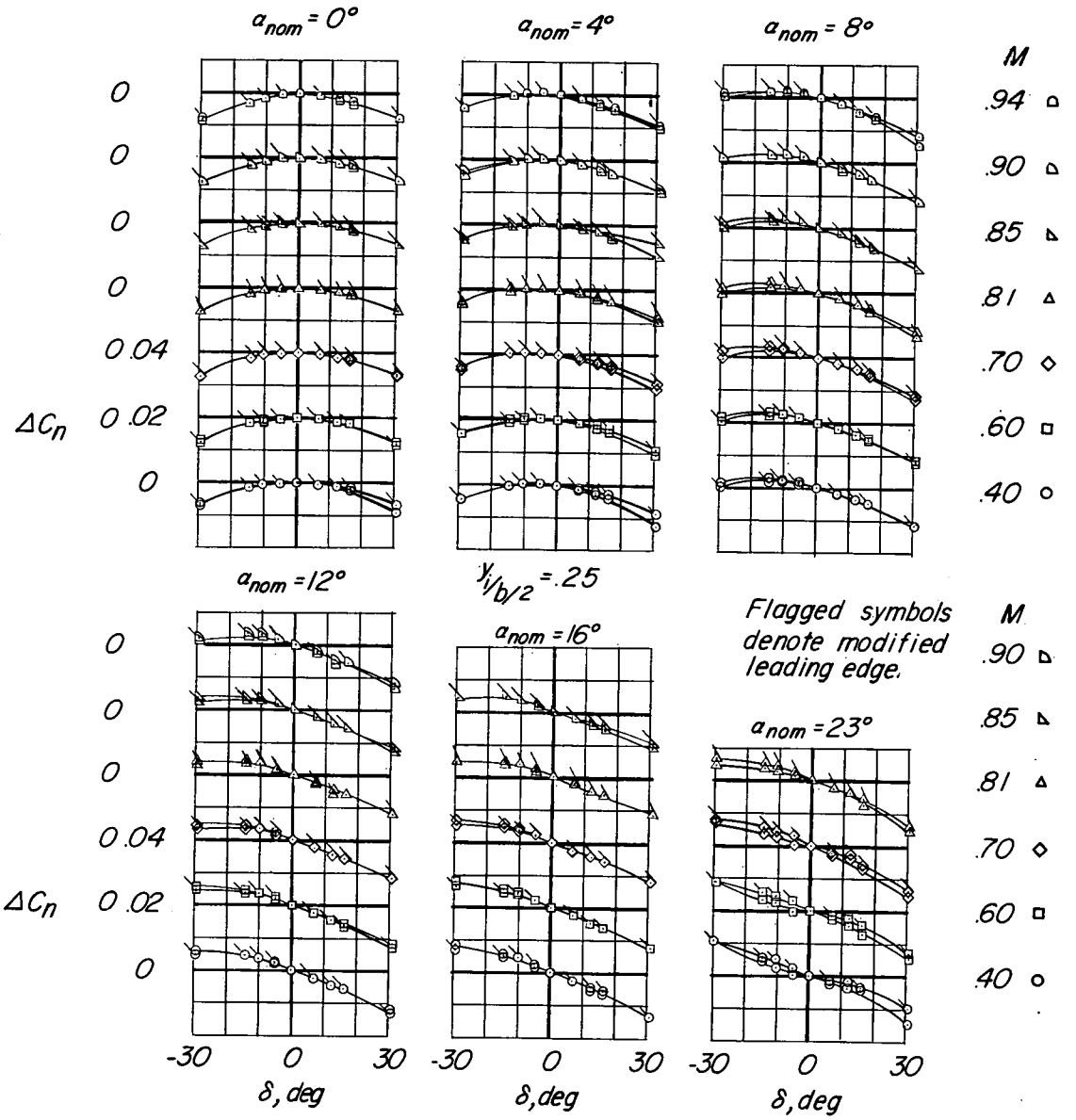


Figure 4.- Effect of wing leading-edge modification on the lift, drag, and pitching-moment characteristics of the model without controls. (Data taken from ref. 5.)



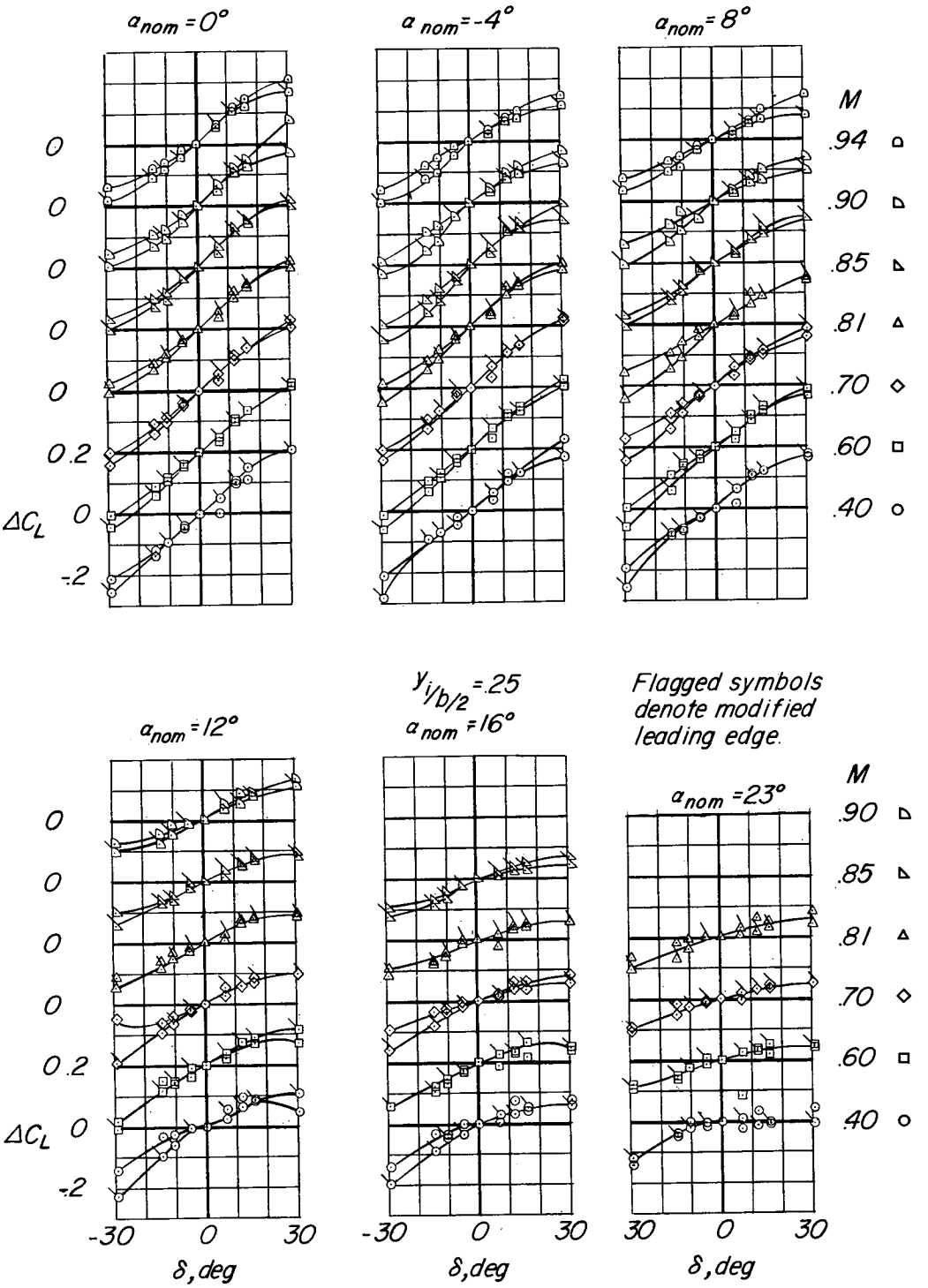
(a) Rolling-moment coefficient.

Figure 5.- Effect of wing leading-edge modification on the variation of incremental aerodynamic coefficients with inboard aileron deflection.



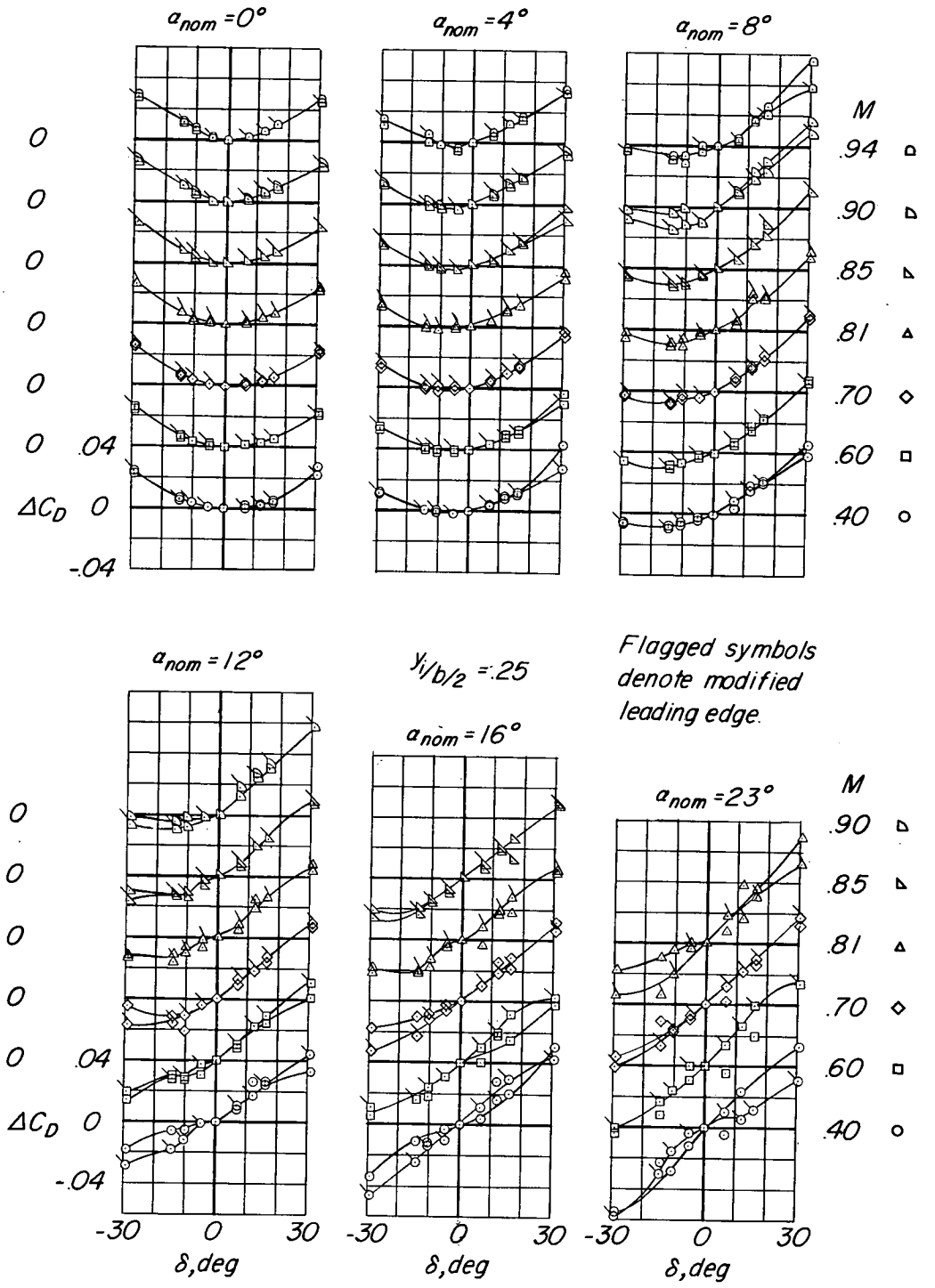
(b) Yawing-moment coefficient.

Figure 5.- Continued.



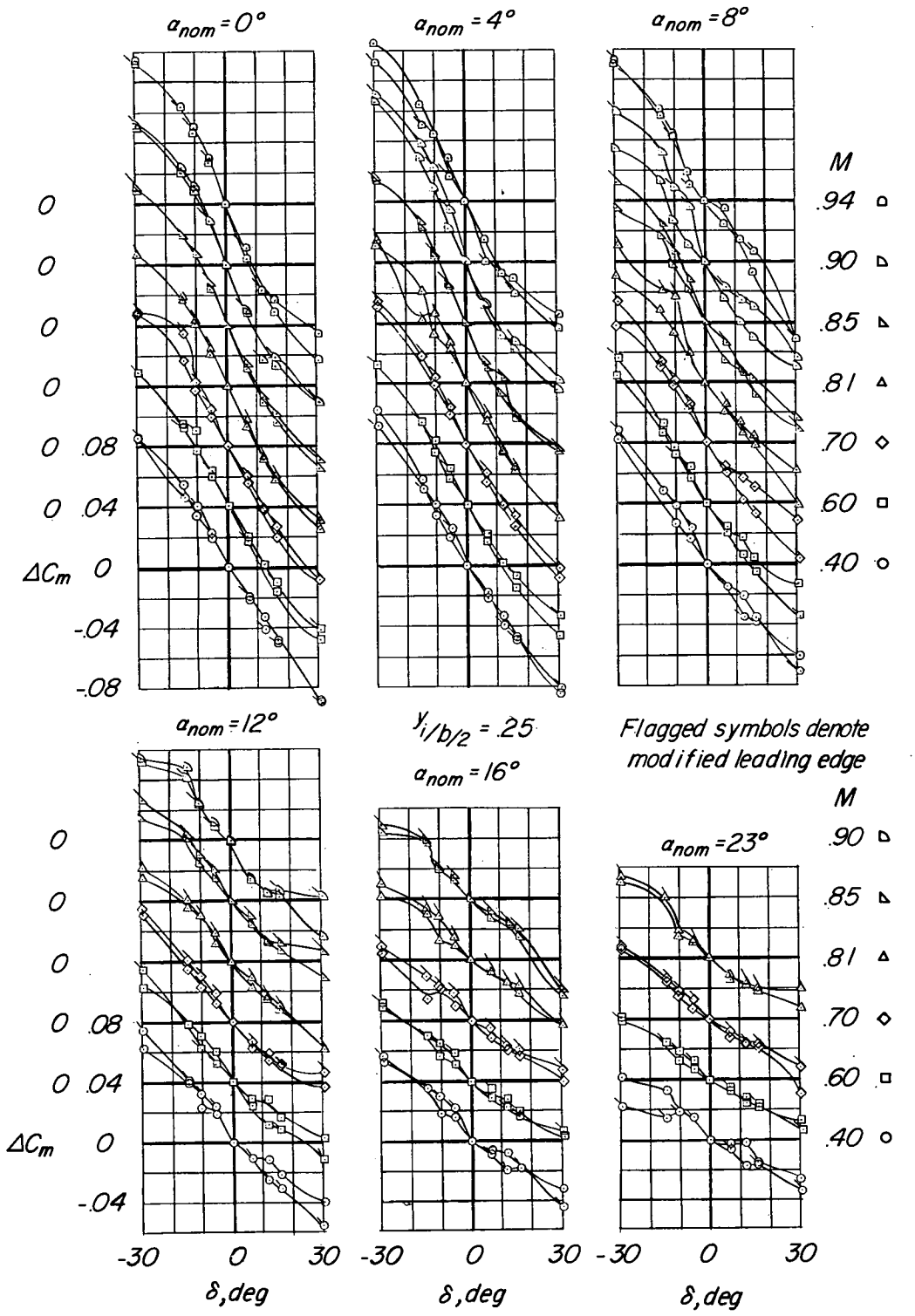
(c) Lift coefficient.

Figure 5.- Continued.



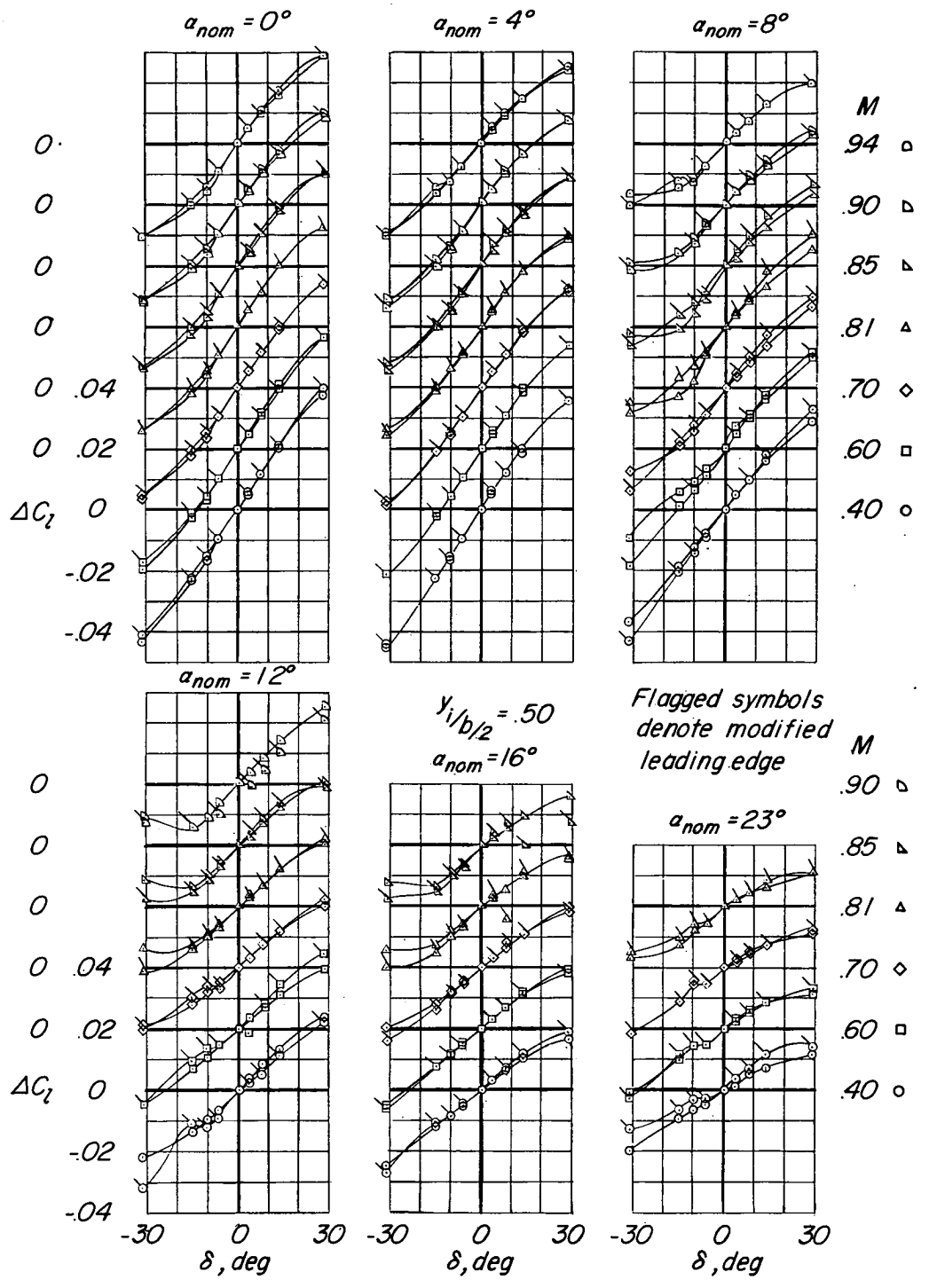
(d) Drag coefficient.

Figure 5.- Continued.



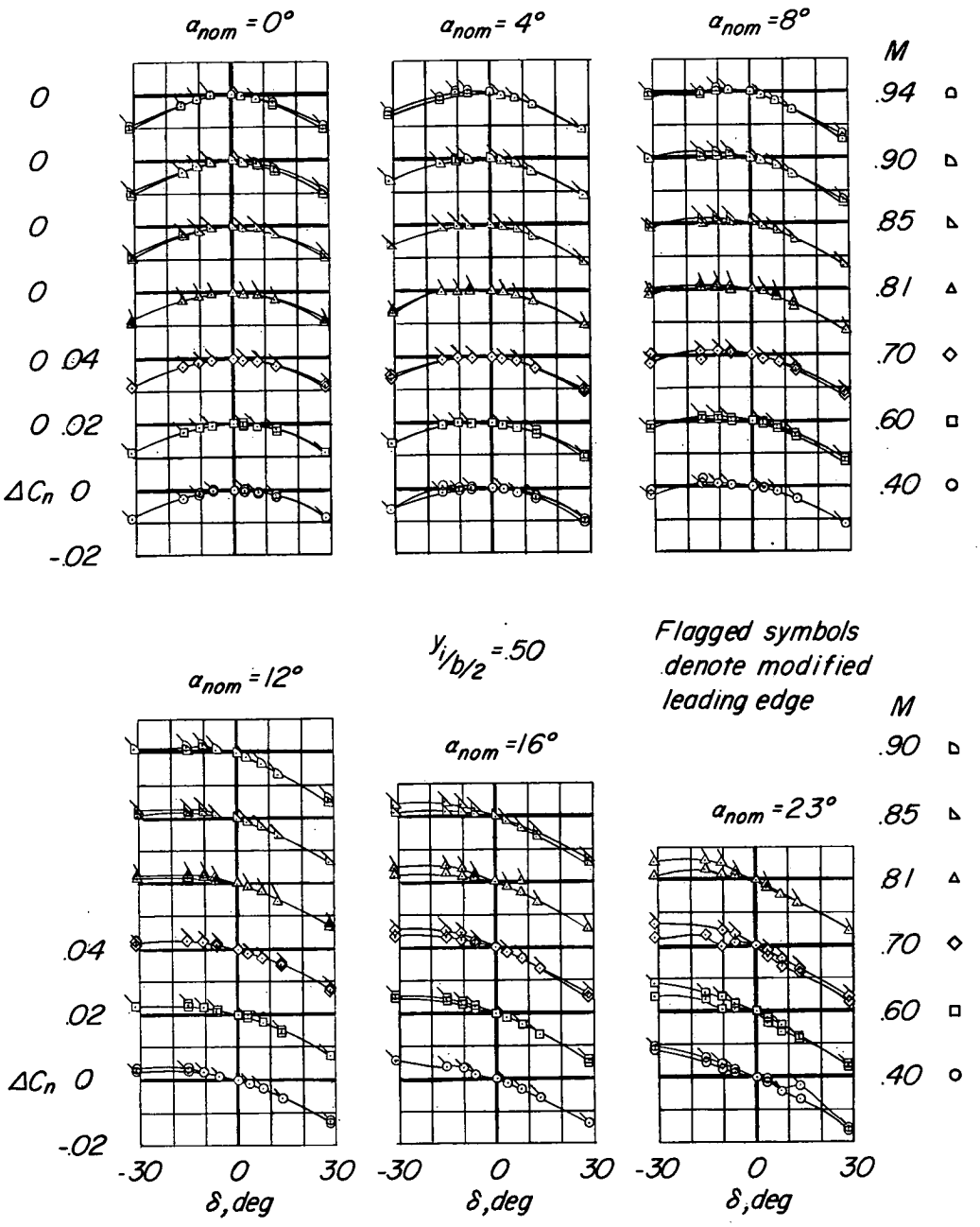
(e) Pitching-moment coefficient.

Figure 5.- Concluded.



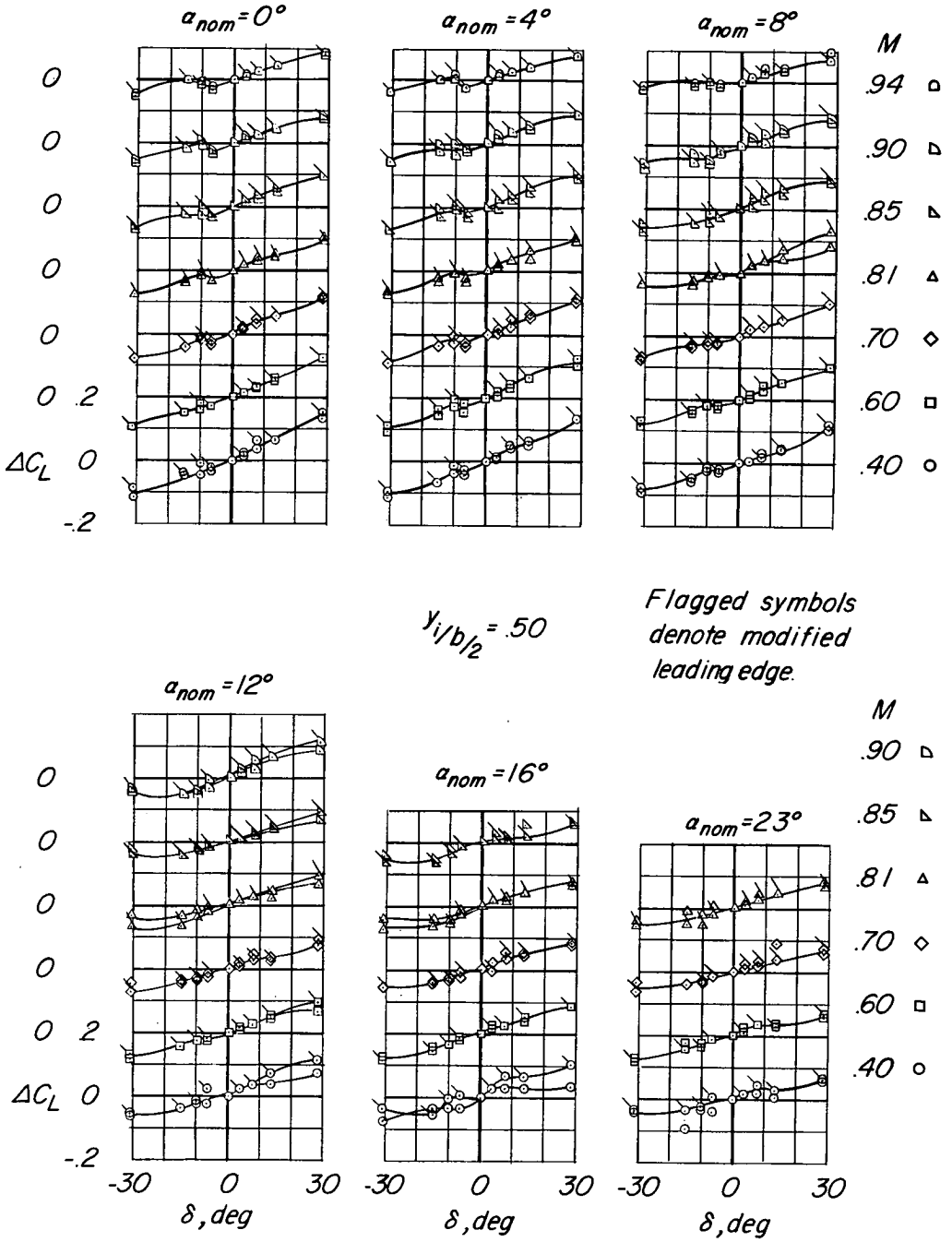
(a) Rolling-moment coefficient.

Figure 6.- Effect of wing leading-edge modification on the variation of incremental aerodynamic coefficients with outboard aileron deflection.



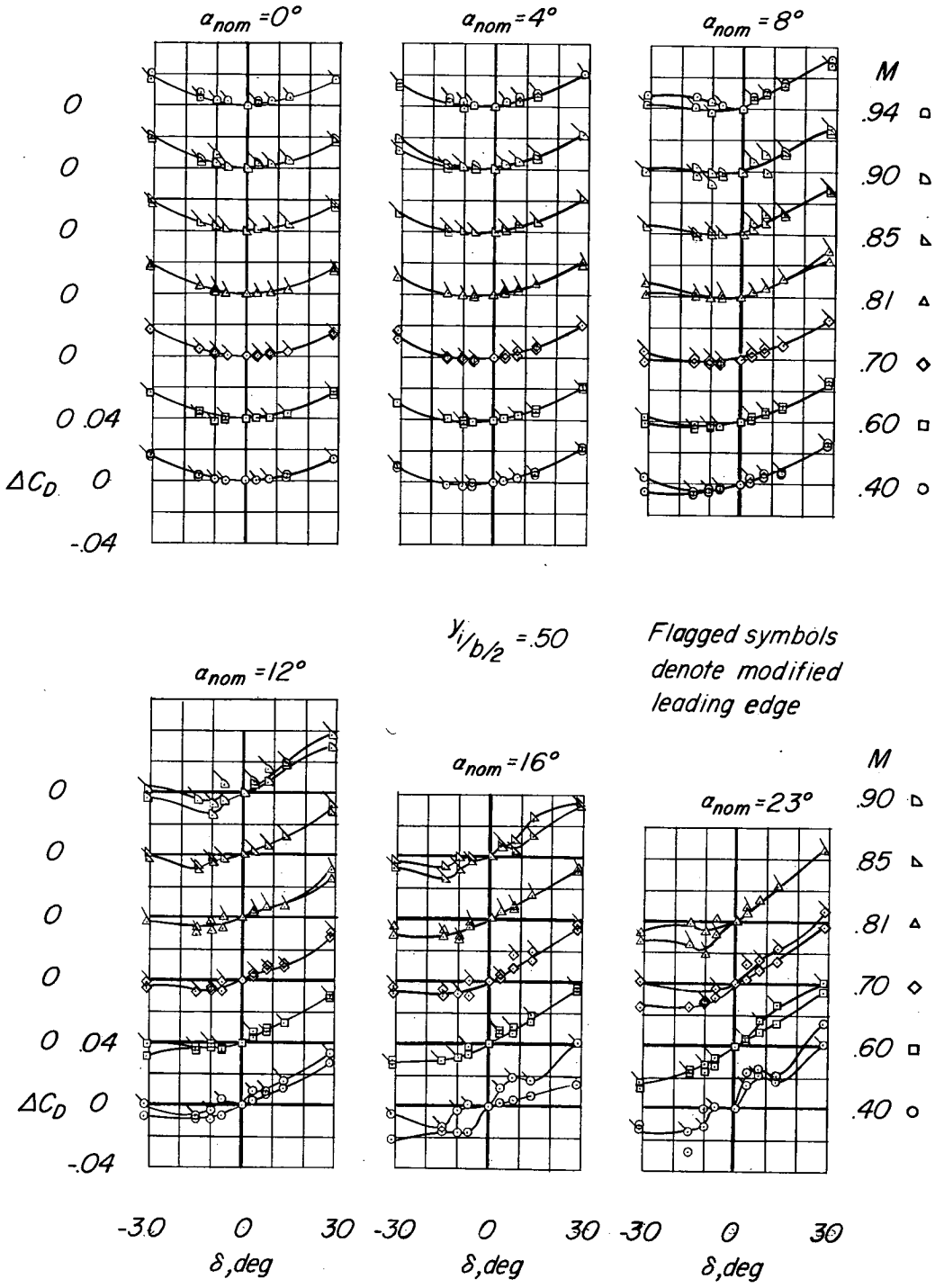
(b) Yawing-moment coefficient.

Figure 6.- Continued.



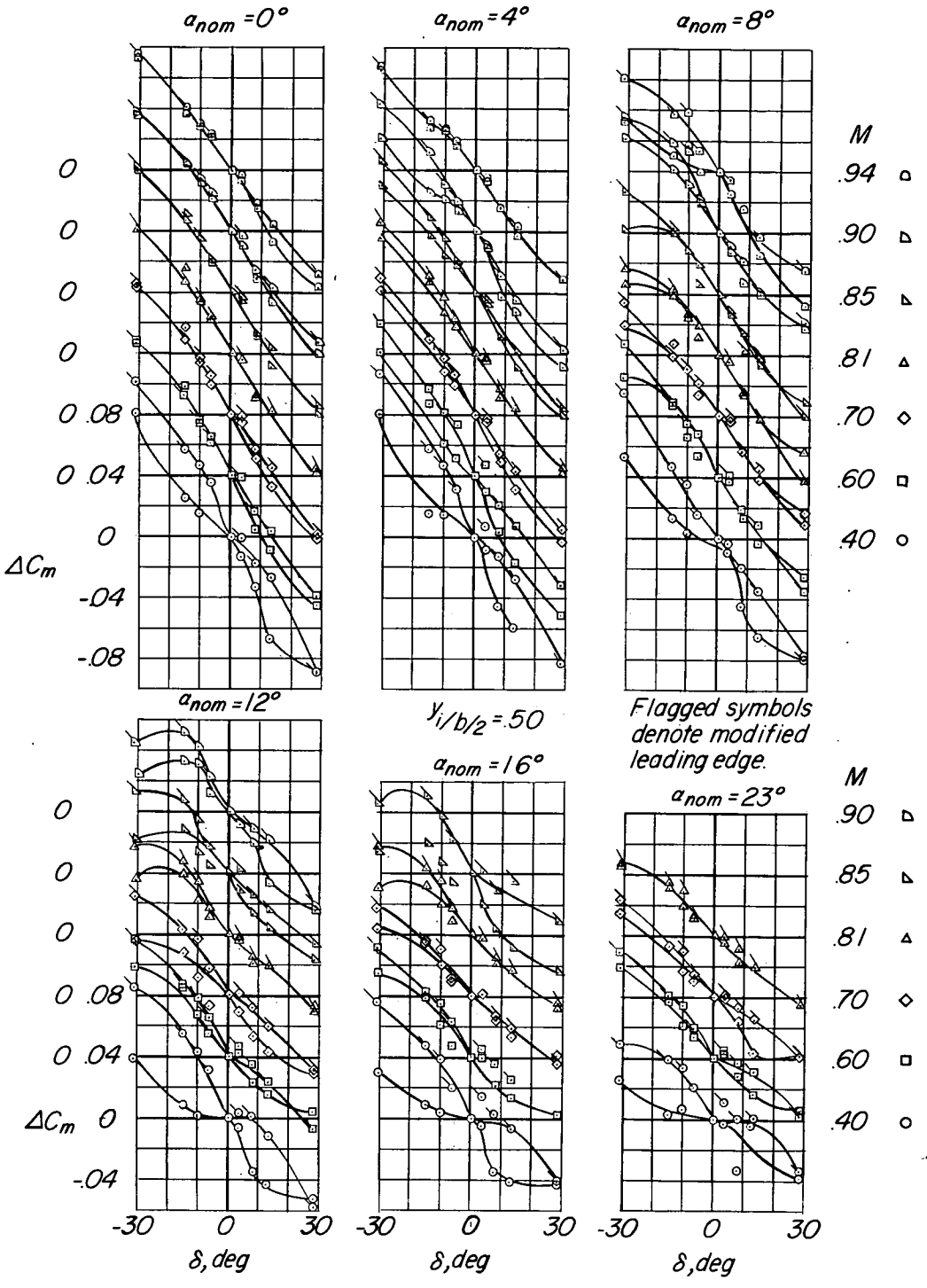
(c) Lift coefficient.

Figure 6.- Continued.



(d) Drag coefficient.

Figure 6.- Continued.



(e) Pitching-moment coefficient.

Figure 6.- Concluded.

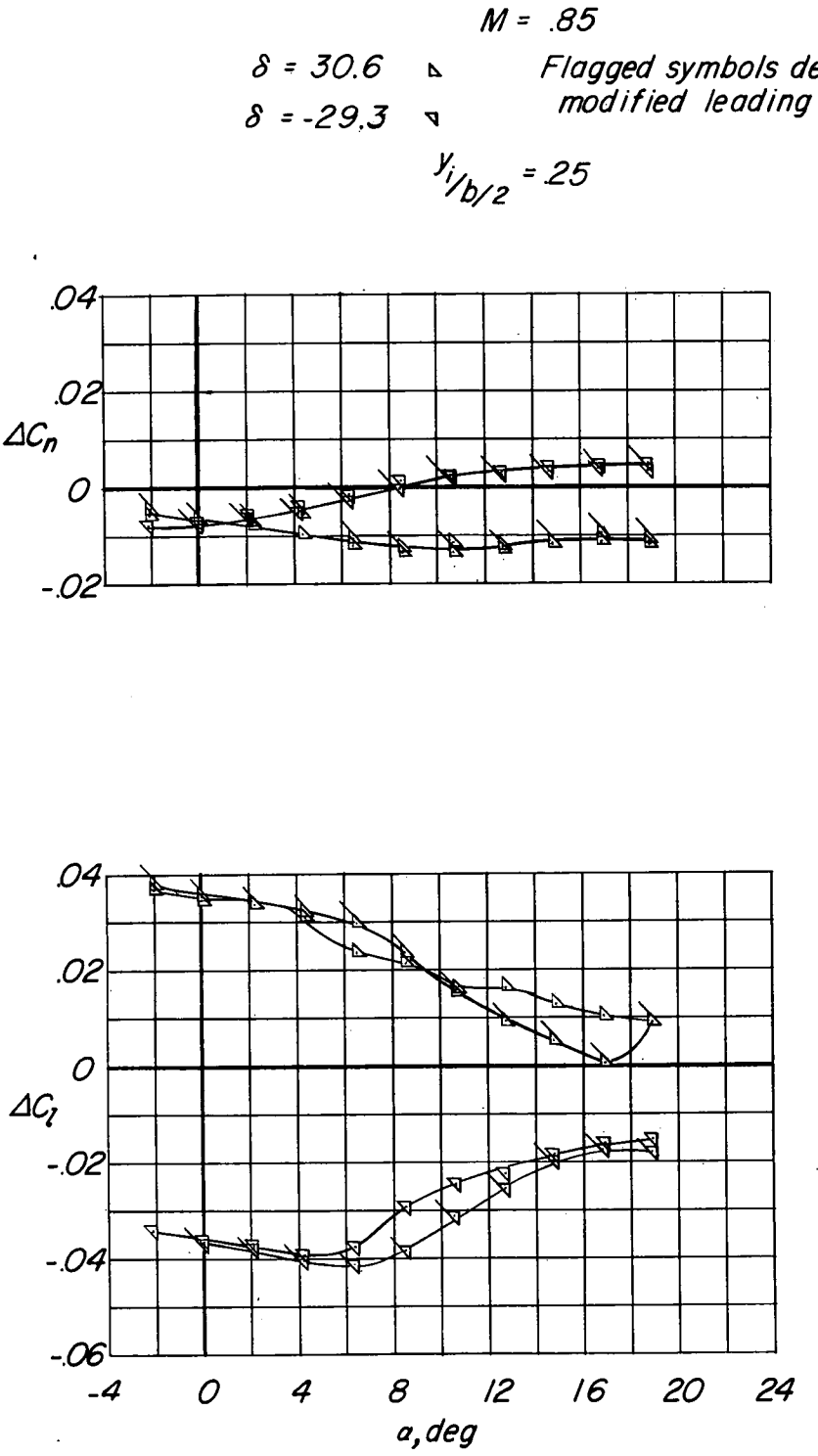


Figure 7.- Effect of wing leading-edge modification on the variation of incremental rolling-moment and yawing-moment coefficient with angle of attack for the inboard aileron.

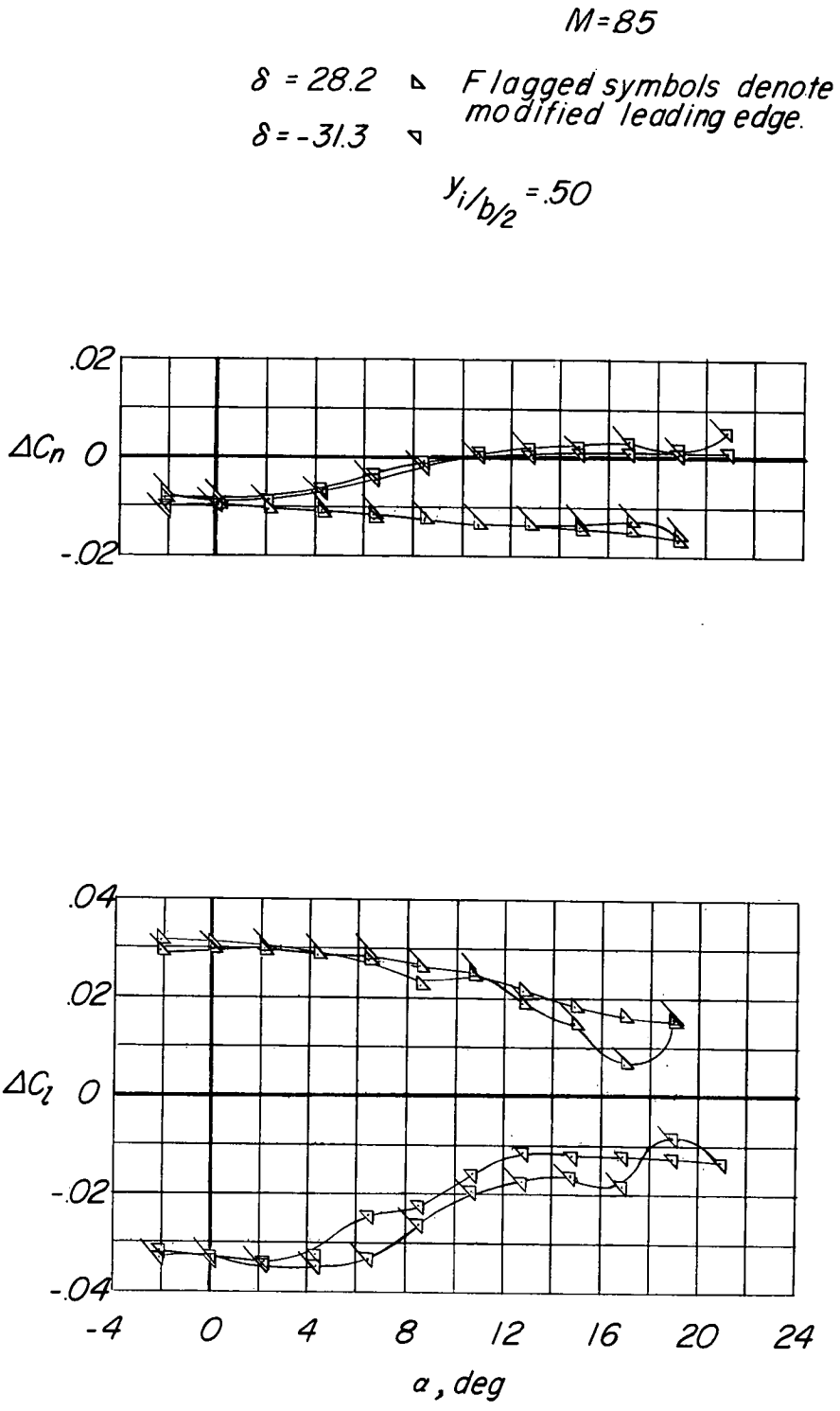
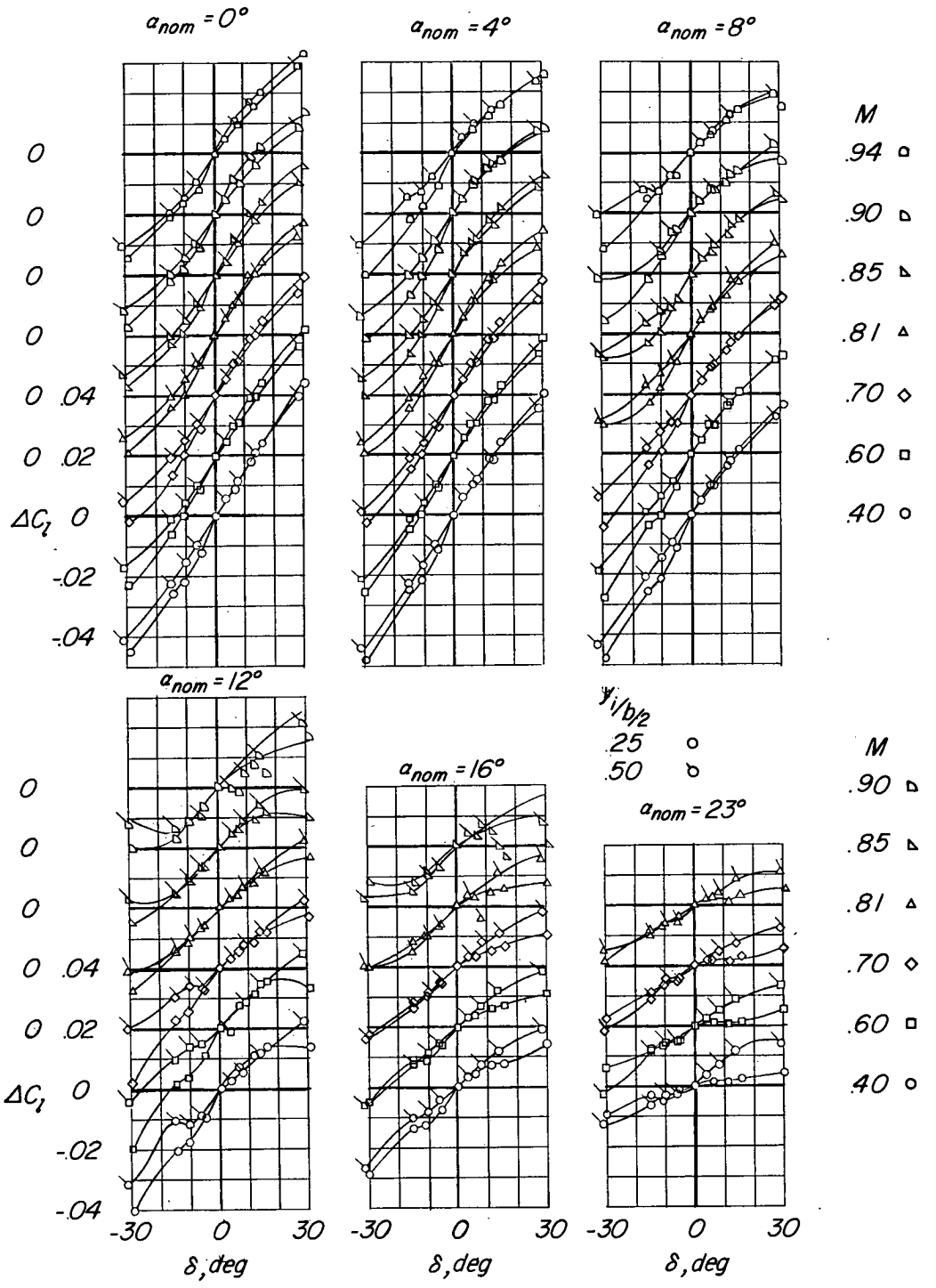
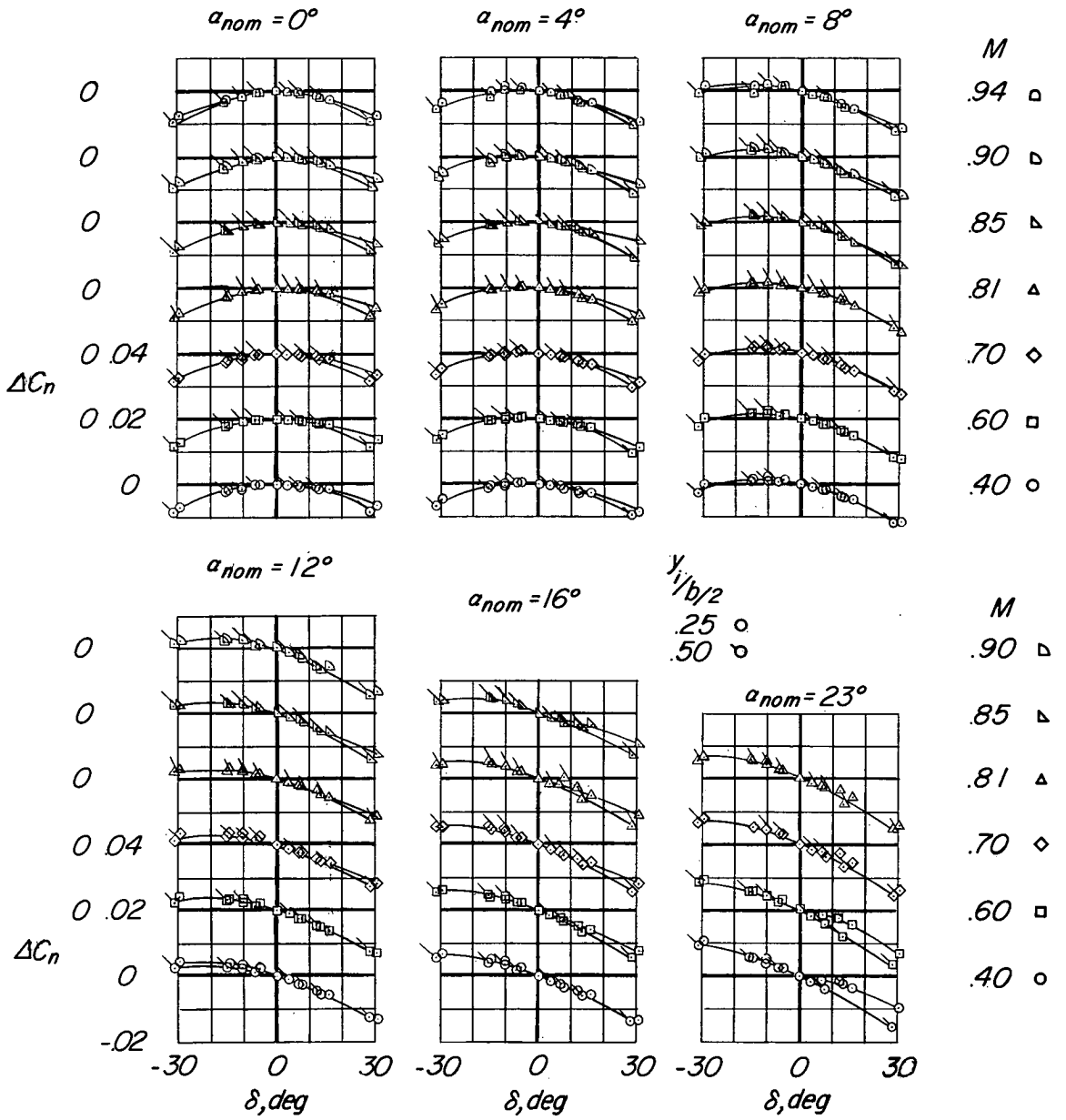


Figure 8.- Effect of wing leading-edge modification on the variation of incremental rolling-moment and yawing-moment coefficient with angle of attack for the outboard aileron.



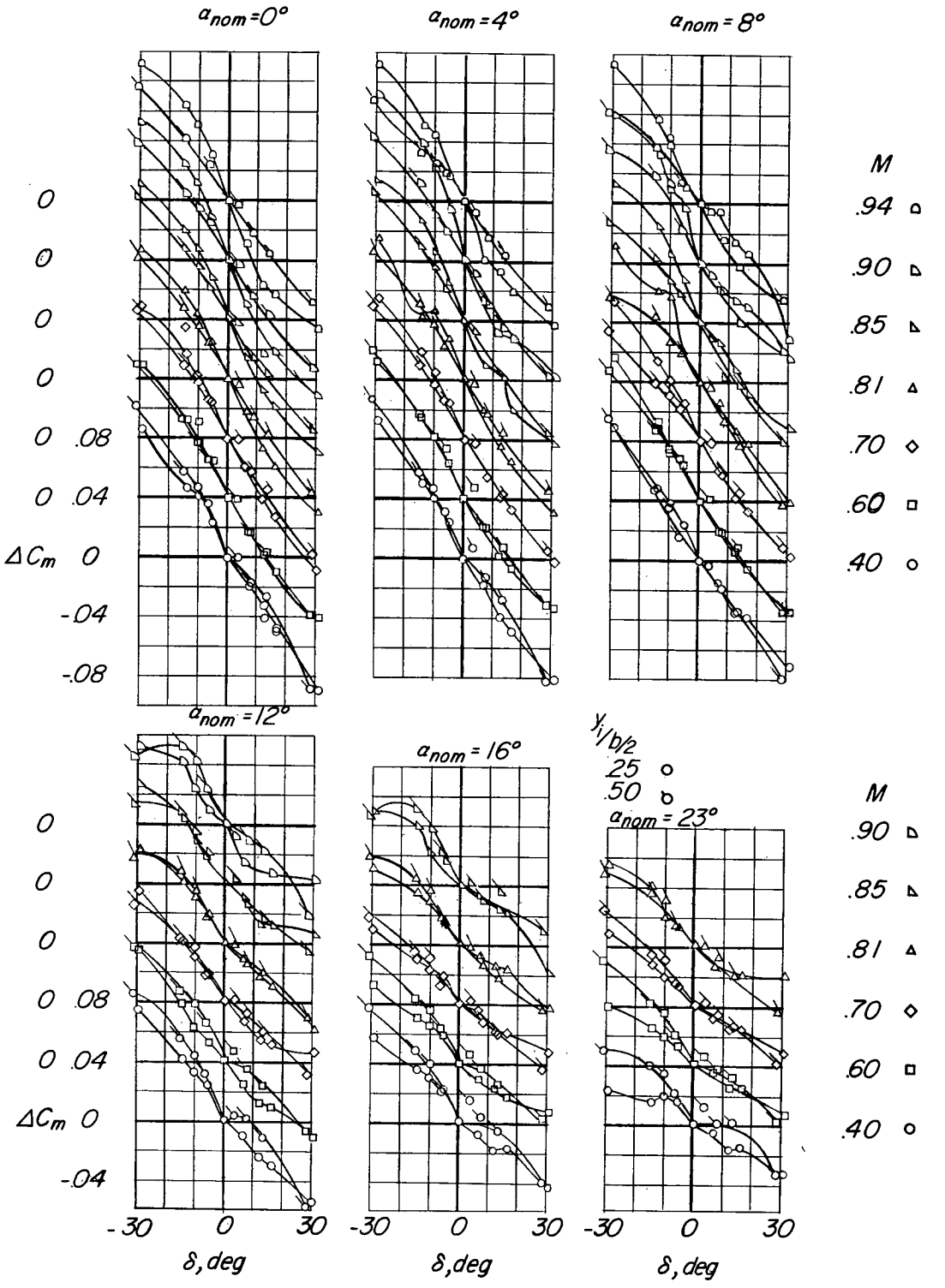
(a) Rolling-moment coefficient.

Figure 9.- Effect of aileron spanwise location on the variation of incremental aerodynamic moment coefficients with aileron deflection on the wing with the modified leading edge.



(b) Yawing-moment coefficient.

Figure 9.- Continued.



(c) Pitching-moment coefficient.

Figure 9.- Concluded.

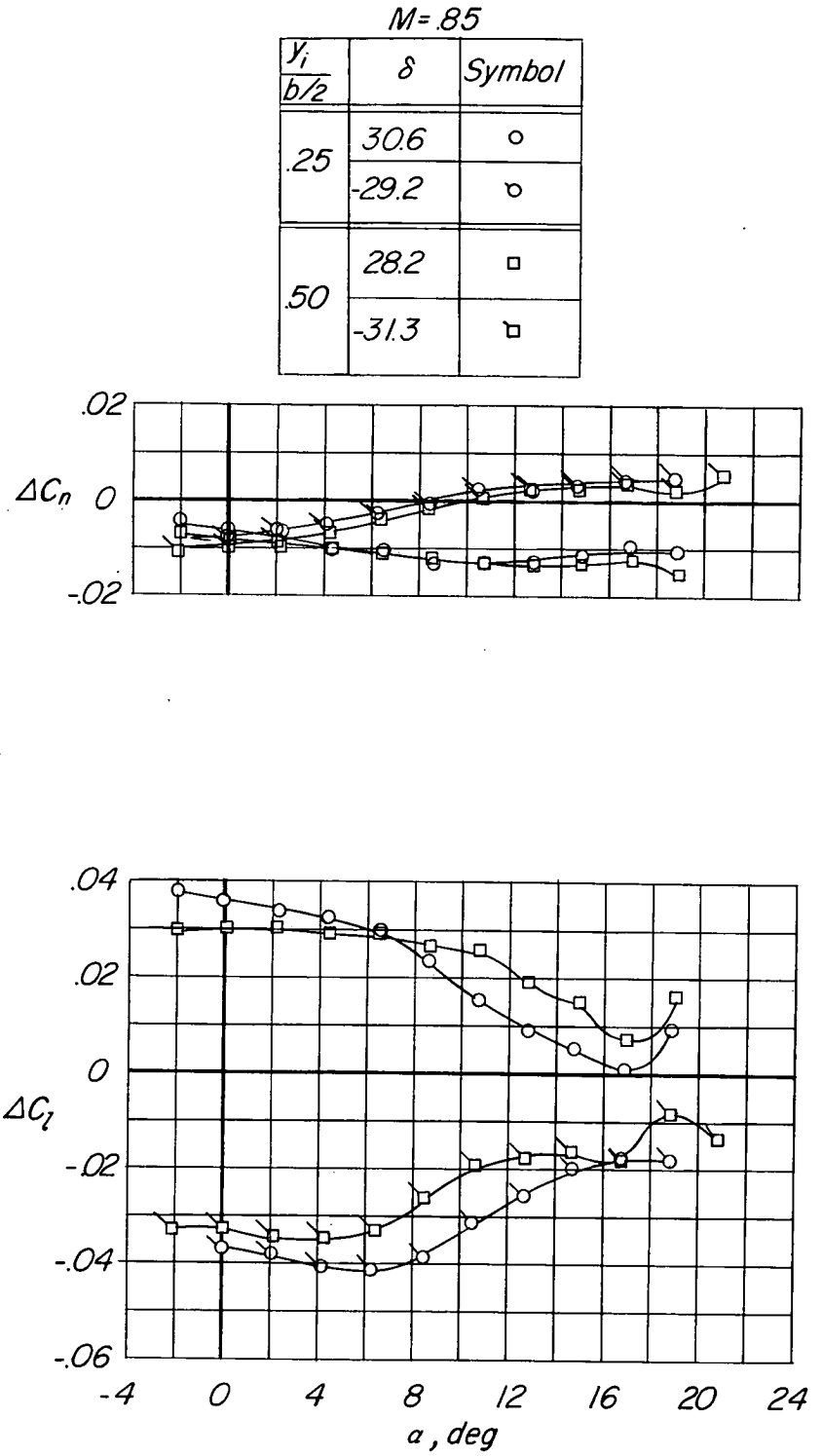


Figure 10.- Effect of aileron spanwise location on the variation of incremental rolling-moment and yawing-moment coefficients with angle of attack on the wing with the modified leading edge.

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